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An Exploration of Sustainable Microfinance Practices in South Africa: A Case Study of the Kuyasa Fund in Cape Town

Jenna Larsen
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Supervisor: Dr Frank Matose

COMPULSORY DECLARATION

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

Signature:_____ Date:_____

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Abstract

This dissertation explored sustainable microfinance (SMF) practices in South Africa through an investigation of the microfinance sector nationally. Since recipients of microfinance largely depend on local ecosystems and natural resource bases for sustaining livelihoods and improving quality of life (QOL), microfinance has been identified as an important development strategy for reducing the vulnerabilities associated with changing environmental conditions for impoverished people. A framework for SMF consisting of four principles was assembled based on the sustainable development theory and microfinance literature. The qualitative methodology encompassed two main approaches: (1) a literature review that located examples of SMF practices found internationally, which contributed to understanding the concept and provided insights for South Africa and; (2) a case study where a sample of organisations across the country and an in-depth look at one housing microfinance institution (MFI) offered insight into SMF practices. Data was collected from the sample by way of interviews and personal correspondence with key players from eight organisations from four provinces. Data gathered from the housing MFI was through 20 interviews with management, staff, partnering organisations and loan recipients; as well as through direct observation of the loan collections process and by reviewing organisation documents. The main finding was that SMF does not yet exist in practice but that it is emerging although it is not yet recognized by the industry at large. Four organisations were beginning to consider the environment in practice through exposure, awareness, environmental initiatives, renewable energy (RE) and by promoting SMF. The evidence was analysed against the SMF framework, which found that two-thirds (2/3) of the criteria supported the framework while the other one-third (1/3) did not. This suggests that more research is needed; since finding relevant organisations was challenging, the housing MFI was a 'loose' fit for the framework where not all aspects of SMF were integrated and the sample organisations were not investigated with enough depth. If sustainability continues to be sacrificed in microfinance practice, it is apparent that loan recipient's lives and the industry will face many challenges and microfinance runs the risk of becoming another development failure.

Key words: microfinance, sustainable development, environment, South Africa

Table of Contents

List of Tables & Figures

Acronyms & Abbreviations

BoP	Bottom of the Pyramid
CFLs	Compact Fluorescent Lights
CSCs	Customer Service Representatives
DBL	Double Bottom Line
DFI	Development Finance Institution
GEAR	Growth, Employment and Redistribution
LED	Light Emitting Diode
MFI	Microfinance Institution
NGO	Non-Governmental Organisation
NR	Natural Resources
PV	Photovoltaic (Solar)
QOL	Quality of Life
RE	Renewable Energy
RDP	Reconstruction and Development Programme
ROSCAs	Rotating Savings and Credit Associations
SD	Sustainable Development
SMF	Sustainable Microfinance
SMMEs	Small, Medium and Micro Enterprises
SWH	Solar Water Heater
TBL	Triple Bottom Line
TKF	The Kuyasa Fund

CHAPTER 1

Introduction

In contemporary times, humanity faces many challenges; increasing inequalities perpetuate human indignities and at the same time, the destruction of natural resources are more apparent than ever before (UNSD, 1992). Billions of people are effected by climate change and land degradation that occurs from deforestation, overgrazing and poor agricultural practices (DFID, et al., 2002, p. 12). Water scarcity, food insecurity, poor sanitation, poor living conditions, workplace safety hazards, lack of education, pollution, energy usage, biodiversity loss, the increase of extreme weather events and the growing vulnerability of people and natural systems are additionally concerning issues (DFID, et al., 2002, p. v; FMO and Triodos Facet, n.d., p. 3; Dulal, et al., 2010, p. 621). The impacts of environmental changes are no longer solely an environmental problem but infiltrate poverty reduction strategies and development in general and these changes have amplified and modified the threats to human and natural systems, especially for the poor (Hammill, Matthew and McCarter, 2008, p. 113). This research sought to explore sustainable microfinance (SMF) in South Africa as a development approach to address poverty and environmental issues. Historically microfinance has focused on social and financial performance, known as the double bottom line (DBL). Therefore, there is a need for a more sustainable development strategy that addresses what has become known as the triple bottom line (TBL) of social performance, environmental protection and economic development. If microfinance as an industry is truly committed to addressing poverty and social injustices, principles of sustainable development (SD) should be firmly embedded in practice. To date there has been little acknowledgement of sustainable principles in microfinance practice in South Africa.

Poverty and the environment are important concepts to this study. Essentially, poverty is characterised by the deprivation of human needs, capabilities and freedoms and for the purpose of this study, encompasses a holistic view that considers both income and non-income factors such as lack of food and sanitation, poor education, inadequate income and housing, risky asset base, increased vulnerability and powerlessness in measuring poverty (Sen, 2001; DFID, et al., 2002, p. 9; Satterthwaite, 2003, p. 75). The World Commission on Environment and

Development (WCED) (1987, p.1) assembled a picture of Earth as an organism "whose health depends on the health of all its parts" meaning each part is vital to the functioning of the whole, not one part should dominate others as this would upset the delicate balance that makes life possible. The environment therefore encompasses both the living and non living components that make up the natural world and the interactions between them that supports life (DFID, et al., 2002, p. 9). For this study, the definition of environment is used as stated in NEMA Act 107 (Republic of South Africa, 1998, p. 8) which clearly shows that the environment consists of complex relationships between humans and every aspect on Earth:

> *Environment means the surroundings within which humans exist and that are made up of:*
> *(i) the land, water and atmosphere of the earth:*
> *(ii) micro-organisms, plant and animal life:*
> *(iii) any part or combination of (i) and (ii) and the interrelationships among and between them: and*
> *(iv) the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being...*

Sociologists are tasked with clarifying "the developments and changes in the institutional composition of society that threaten the proper functioning of the sustenance base" (Spaargaren and Mol, 1992, p. 326). This challenge is embodied in this dissertation as no previous research has been conducted on this topic in South Africa, which could provide insight for further research. Organisations, microfinance and the field of development potentially all could benefit from this study. This chapter introduces the main concepts and contexts upon which this research was built and addresses the aims, objectives, research questions, research design and chapter outline of the dissertation.

1.1 Aims and Objectives

This study argues that microfinance, by incorporating sustainable development (SD) principles, has the potential to be more instrumental in addressing poverty issues and sustainability. Such position led to the investigation of the microfinance sector in South Africa where a case study provided insight into the national context and a specific housing microfinance institution (MFI).

The objectives were to:

- construct a framework for sustainable microfinance (SMF) identified from the literature in order to apply theory to practice;
- locate examples of SMF found in other countries to provide insight for South Africa;

- compile a database of development finance institutions (DFIs) and potential environmental partners for reference,
- locate examples of SMF found in South Africa to compliment the case study;
- evaluate the case study against the SMF framework;
- draw insights from the case study for SMF practices in South Africa.

1.2 Research Questions

The research was guided by the following questions:

- What is sustainable microfinance (SMF)?
- How can microfinance adopt principles of sustainability in practice?
- What is the situation regarding SMF practices in South Africa?
- How does the case study contribute to understanding SMF?
- What insights can be drawn from the case study for adopting SMF principles in South Africa?

1.3 Contextual Background

This section elaborates upon the concepts of sustainable development (SD) and microfinance that provide the foundation for this research. Additionally sustainable microfinance (SMF) is introduced and South Africa's role in SD and microfinance is unpacked.

1.3.1 Sustainable Development

For the past thirty years, sustainable development (SD) has emerged as one response to the challenges of addressing poverty, the environment and economic growth simultaneously (WCED, 1987). The concept of SD was introduced in 1980 by the World Conservation Strategy (WCS) in response to the convergence of conservationist and economic paradigms (Mainka, McNeely and Jackson, 2005, p.23; Langhelle, 1999, p.132). The term is of latin origin meaning "to uphold" a single resource (land), a group of recources (ecosystem) or societal and individual welfare (Langhelle, 1999, p. 132). For the purpose of this dissertation, the most widely accepted (Langhelle, 1999, pp. 132, 144; Spaargaren and Mol, 1992, p. 333) definition of SD is used as found in *Our Common Future* also known as the 'Brundtland Report' published by the World Commission on Environment and Development in 1987 (WCED, 1987, p. 43) which states, "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Since the beginning, the global community has demonstrated steadfast committment to upholding SD principles

established by numerous international conferences such as the 1992 United Nations Conference on Environment and Development (Rio Earth Summit), the 2000 Millenium Summit, the 2002 World Summit on Sustainable Development (WSSD) and by adopting documents such as the 'Brundtland Report', Agenda 21, Millenium Development Goals (MDGs) and the Johannesburg Plan of Implimentation (JPOI) (Mainka, McNeely and Jackson, 2005, p. 23; Smith and Hartnack, n.d., p. 6; UNSD, 1992; Goldsworthy, 2008).

1.3.2 Microfinance

Microfinance is the concept popularised by Muhammad Yunus stemming from his work in rural Bangladesh from the 1970s. Traditionally the poor have been excluded from the formal financial sector and this continues to be the case today. This is due to the perception that the poor are not credit-worthy, as many do not have the collateral required to partake in the system (Prahalad, 2005, p. 292). Throughout much of the developing world, between six and 47 percent of people have access to formal financial institutions whereas in many European countries these estimates average 90 percent (Anon., 2006, p. 2). This financial market niche arose to address the vast exclusionary policies found in the formal financial sector. Commercial banks, agricultural banks, community banks, postal savings, co-operatives, non-governmental organisations (NGOs), private retailers, insurance companies and savings clubs are just a few of the possible microfinance outlets which are provided collectively by both formal and semi-formal entities (ibid, p. 10).

It all began with a simple realization, credit is a human right. Yunus (1999, pp. 150, 209) believes passionately that poverty is not created by the poor but is due to the policies and structures pursued by society and that changing such structures, as simple as "banking the unbankable", will unleash credit as an economic power that will inevitably lead to social transformation. In this sense, microfinance is an important tool for development: poverty reduction, improving gender inequalities and strengthening economic growth. The model developed by Yunus known as the Grameen model (named after the Grameen Bank), offers small loans through solidarity group lending to poor women who do not have collateral and who intend to engage in income generating activities where trust between the borrower and the bank become important (CGAP and UNCDF, 2006; Yunus, 1999, p. 135). Women are prime candidates for micro-loans due to a couple of key perceptions. Women are in charge of the household therefore monetary benefits tend to trickle down to their families and are used to improve the welfare of the entire household through areas such as education and healthcare; and women are prone to respond better to accountability measures that many MFIs have in place that act as social collateral (Prahalad, 2005, p. 293; Mosley and Rock, 2004, p. 467). Today,

the effects of this initial model have been vast. Currently there are over 7,000 MFIs operating globally and the impact of microfinance has touched hundreds of millions of lives through steadily growing recipient numbers (Daley-Harris, 2007, p. 2). There are debates about the contribution and effectiveness of microfinance in poverty alleviation that offers a critical perspective and this study is cognisant of these but focuses on microfinance's role in sustainable development (SD).[1]

Microfinance for development incorporates transactional and transformational services for the bottom of the pyramid (BoP)[2] market and for the purpose of this dissertation is based on the following characteristics (Goldsworthy, 2010, p. 451; Khandakar and Rahman, 2006, p. 477; Anon., 2006, p. 17): Social mission[3] driven organisation that aims to equip the poor with the tools to sustainably elevate themselves out of poverty; loans are used for enterprise development or income generation; transactional services such as standardized and limited set of financial services (savings, credit, remittances, leases and insurance) that provide access at reasonable rates; group lending and savings schemes that act as social collateral; and transformational services (business and skills development and capacity building).

1.3.3 The Microfinance Gap

Hammill, et al. (2008, p. 114) say that the challenge now is to minimize humanity's future impacts on environmental conditions and adapt to current changes. Microfinance has been identified as one such strategy that can address poverty reduction measures and improve environmental conditions simultaneously as many of these environmental and social problems are faced by loan recipients. Generally microfinance as an industry has neglected considering the environment in practice (Goldsworthy, 2008, p. 13). Much of the research focus has been on measuring social and economic impacts (double bottom line or DBL) but very little has been about the environment (triple bottom line or TBL).[4] In this light, there is a need for microfinance to look beyond economic aspects to the ways in which the lives of the poor are made vulnerable (Goldsworthy, 2010, p. 446). Much of the research that has been done uncovers what seems to be a disconnect between the mission of microfinance and the realities of the loan recipients

[1] There are advocates of microfinance, those who consider microfinance to have mixed results and sceptics (Goldsworthy, 2010, pp. 450-451). Some even provide a Marxist critique (Raza, 2010). In this view, microfinance is seen to bring capitalist globalisation to the rural level where rather than alleviating poverty by turning the poor into petit-bourgeoisie; they are turned into indentured wage labourers and remain the proletariat, which is a response to the need of capitalism to exploit new markets (ibid, p. 64).

[2] BoP refers to the poorest socio-economic group that is the largest population worldwide. This concept is used by scholars in the industry who are targeting or working with this population.

[3] Social mission refers to goals services of the organisation to improve the conditions of people living in poverty, in this case by providing capital so that the poor have the opportunity to generate income and improve their quality of life (QOL).

[4] Reseach conducted by Archer (2009, p. 86) found that only one in ten (ten percent) of MFIs include environmental protection in lending criteria. Goldsworthy's (2008, p. 16) research confirms that there is a general lack of recognition and knowledge about the impacts of microfinance on the environment.

suggesting that women, the poor and the planet may be further harmed rather than helped by microfinance (Archer, 2009, p. 87). MFIs face the challenge of improving the lives of the poor which is the social mission while at the same time maintaining financial sustainability, but adding an environmental element increases those challenges (Hammill, Matthew and McCarter, 2008, p. 115). There is a clear divide between those scholars advocating the environment and those that are sceptics, but what is agreed upon is the fact the environment can no longer be ignored in microfinance. Including sustainability in microfinance practice is an important step towards more successful development strategies.

1.4 The South African Context

South Africa faces many challenges regarding the complex nature of its environmental and social issues. South Africa is considered a middle income country with a population of over 49 million people where close to 50 percent live in poverty (Centre for Microfinance, 2010, p. 6; UNDP, 2003; Woolard and Leibbrandt, 1999, p. 11; STATSSA, 2009a). Conservative estimates indicate that 24 to 57 percent of the population are unemployed, which is more than half of all working-age adults (STATSSA, 2009b). Measuring poverty is complicated in South Africa because there is no formal poverty line (DPRU, 2008, p. 3) but indicators such as headcount poverty, Gini coefficient, Human Development Index (HDI), Human Poverty Index (HPI), Household Subsistence Level (HSL) and Minimum Living Level (MLL) are commonly used in reporting poverty and inequality data (UNDP, 2003, p. 70; Woolard and Leibbrandt, 1999, p. 11). Poverty in South Africa stems from the historical apartheid system of oppression that imposed land dispossession policies, the formation of homelands, and economic dependency by migrant labour practices on the black African population (Aliber, 2002, pp. 2, 5). Economic development was pursued with little consideration for the sustainability of the environment (IDRC, 1995,p. 22). Even though the apartheid government emphasized conservation through the formation of protected areas and national parks, this was accomplished at the expense of excluding local people from partaking in the use of natural resources (Aliber, 2002, p. 5). Local populations were often relocated to marginal land that could not sustain livelihoods which led to further environmental problems (Aliber, 2002, p. 5; IDRC, 1995, p. 22).

The consumption of natural resources are unequal and many issues arise for impoverished people; those living in rural areas are directly dependant on ecosystems for survival (Egoha et al., 2009, p. 554); and environmental hazards found in urban areas such as inadequate sanitation, polluted water, overcrowded housing, waste accumulation, degraded land and poor air quality make up the realities of township dwellers. To make matters worse, many of these

settlements are in locations that are prone to natural disasters that tend to be magnified by other environmental hazards (Smith and Hartnack, n.d., p. 10). South Africa is home to a wealth of biodiversity and fragile ecosystems[5] hence the links between poverty and environmental problems are intensified. Land degradation and desertification are identified as key forms of land transformation linked to pressing issues such as food insecurity, poverty, urbanization, climate change and biodiversity loss to name a few (DEAT, 2006b, pp. 88-90).

1.4.1 Sustainable Development

Since the early 1990s, sustainable development (SD) has been on the agenda of the post apartheid South African government (Schwabe, 2002, p. 14). Many policies and initiatives have upheld SD principles such as: The Constitution, National Framework for Sustainable Development (NFSD), Environmental Management Policy for South Africa (White Paper of 1998), National Environmental Management Act (NEMA), Reconstruction and Development Programme (RDP), Growth, Employment and Redistribution Plan (GEAR), Working for Water Programme (WfW), Landcare Programme, Rural Development and Accelerated and Shared Growth Initiative-South Africa (AsgiSA) (ibid; Aliber, 2002, p. 12; DEAT, 1998; Smith and Hartnack, n.d.; Le Maitre, O'Farrell and Reyers, 2007). South Africa's Constitution (1996, pp. 1251-53) ensures environmental rights for every citizen. Section 24 states that everyone has the right to an environment that is not harmful to their health or well-being (…), to have the environment protected for present and future generations by preventing pollution and degradation, promoting conservation and securing sustainable develoment (SD). When considered together with other Sections (Section 26 and 27), it is evident that access to sustained natural resources is the right of every citizen to meet basic needs (Smith and Hartnack, n.d., p. 16). All of these policies, legislations and programmes demonstrate South Africa's awareness to growing social and environmental concerns and the committment to ensuring that development is sustainable.

1.4.2 Microfinance

Bamu and Collier (2005, p.7) state, "South Africa's high unemployment rate, gross inequality of income and burgeoning informal economy suggests a dire need for a vibrant and efficient microcredit industry." Even former Director General of the Department of Trade and Industry (DTI) Alistair Ruiters, proclaimed "the microcredit industry is crucial to development in South Africa as it can provide the capital required to facilitate the integration of all people into the mainstream economy" (ibid, p. 23). Although the banked[6] population has increased through the

[5] South Africa makes up 2% of Earth's surface and yet hosts 10% of all plant species and 7% of all vertebrates and is home to three of the world's 34 global biodiversity hotspots (Le Maitre, O'Farrell and Reyers, 2007, p. 368).
[6] Banked refers to the adult population that use bank accounts.

expansion of affordable financial options (Mzansi Account, Postbank and MFIs), many of the poorest in society remain excluded (Centre for Microfinance, 2010, p. 1). Additionally, the microfinance sector currently serves only 7.5 percent of the two million micro-enterprises (ibid, pp. 4, 21) which means that there is a huge opportunity for microfinance to assist those remaining.

In the South African context, women are highly active in the informal economy especially within the micro-enterprise sector and often are the main providers in the family (M-CRIL, 2008a, p. 9). According to one report, South Africa is estimated to have 722, 559 microfinance borrowers and is the third highest of all countries reporting data worldwide (MIX and CGAP, 2010, p. 2). Additionally, South Africa has a loan portfolio of 3.1 million USD with a 4.7 percent portfolio risk (ibid). South Africa is considered a leader as it accounts for over 70 percent of total MFI loan recipients in the southern African region (ibid, p. 6).[7] Microfinance in South Africa generally refers to the subprime lending sector that constitutes banks and private firms that form the more developed consumer finance sector. Also in existence is a poorly developed development finance sector consisting of MFIs, non-governmental organisations (NGOs) and rotating savings and credit associations (ROSCAs) where the general trend is to lend to the urban, salaried, moderately poor population rather than serve the destitute poor (M-CRIL, 2008a, p. 3; The Global Microfinance Rating Agency, 2008, p. 2).

Microfinance has provided opportunities for rural and urban poor to improve livelihoods in many developing countries but for unique and historical reasons, it has faced many challenges in South Africa (The Global Microfinance Rating Agency, 2008; Centre for Microfinance, 2010; M-CRIL, 2008a; Bamu and Collier, 2005; Baumann, 2001, Siyongwana, 2004; Skowronski, 2007). The policies of the apartheid era were influential in the moulding of a highly fragmented financial market (Siyongwana, 2004, p. 853). Due to the seclusion of the country from the global economy, local financial reserves could only service well-established companies and whites (ibid). Because of this practice, a strong informal financial system emerged alongside its formal counterpart, which was considered an important sector for the unbanked black population (ibid, pp. 853, 863). Informal systems included *bomashonisas* (unregistered moneylenders) usually located in townships and known to charge exorbitant interest rates, *amafele* or *stokvels* (credit unions) or *umgalelo* or *Gooi-Gooi* (rotating savings and credit associations called ROSCAs) (ibid, p. 853). These informal institutions operated outside of the Usury Act 73 of 1968 which prohibited moneylenders from charging fees that exceeded those determined by the

[7] The Microfinance Information Exchange (MIX Market) is the most comprehensive source of financial and social data on MFIs globally. The weakness in the statistics obtained from MIX data stems from the fact that since 2005 only five South African MFIs (out of more than twenty) have reported data from which the report statistics are drawn, thus weakening the results (http://www.themix.org/).

Minister of Trade and Industry (Bamu and Collier, 2005, pp. 17, 35-36). Also under the apartheid administration, property ownership nor entrepreneurship amongst the black majority were encouraged (ibid, p. 18). Many used credit for daily consumption needs rather than more sustainable practices such as enterprise creation and income generation (Bamu and Collier, 2005, pp. 14, 19; HSRC, 2002, p. 10; MIX and CGAP, 2010, p. 6). This is in contrast to many other developing countries where microfinance services were used strictly for enterprise creation or for the upgrading of small, medium and micro-enterprises (SMMEs) (Siyongwana, 2004, p. 853). It was really only in the 1980s that the microfinance market emerged in South Africa and has undergone dramatic changes through today (Skowronski, 2007, p. 1).

Another peculiarity of the South African situation is the "two economies" narrative. This narrative suggests South Africa truly is a world in one country (Baumann, 2001, p. 4; Centre for Microfinance, 2010, p. 6). The study is aware of the contention of the dual economy narrative from scholars but the fact remains that vast inequalities contribute to challenges to the circumstances of microfinance recipients. The country's two economies coexist and at one end is a modern sector on par with the globalised economy and reflects the lifestyles enjoyed by the first world but on the other end the traditional sector experiences lifestyles of the destitute that place it amongst the worst 20% in the world (ibid). This dichotomy of a dualistic economy has become part of the country's neoliberal implementation of development policies ever since public discourse around the issue was raised during the Mbeki administration (Hart, 2006, p. 24). Microfinance targets the spectrum of the economically active poor (micro enterprise poor), the very poor (the survivalist enterprise poor) and the 'hard core' (destitute poor) and is meant to address the inequalities within the second economy, providing access to capital to those otherwise excluded.

Thus, there are numerous challenges facing MFIs within the South African context which stem from complexities within the second economy and its intersection with the first economy and consist of four major areas: loan recipient preference, economic dualism, competition and human settlement (Baumann, 2001, 2004; CGAP and UNCDF, 2006; Bamu and Collier, 2005; Skowronski, 2007). Firstly, loan recipient preference refers to perceptions of debt. Since income is positively correlated to race in South Africa, many poor people from black households have historically relied on informal providers and therefore many feel more comfortable in continuing to use familiar services (Skowronski, 2007, p. 3). Other factors such as poverty views, cultural norms, socio-economic class status, historical discrimination, religious beliefs and gender-focused tensions have all contributed to the stigma attached to formal financial usage (CGAP and UNCDF, 2006, p. 24). Also, on average low income households diversify their

finances in over 17 financial instruments per year, the majority of which are from informal providers (Skowronski, 2007, p. 3). Due to high unemployment rates, many are forced into entrepreneurship out of necessity and would rather switch to formal employment, as it becomes available (ibid, pp. 5-6). For many, individual lending options are too costly as it involves too much risk for low-income households (Baumann, 2004, p. 797).

Secondly, economic dualism refers to high costs of the industry. MFIs in South Africa pay first-world salaries to employees whilst earning revenues from small loan quantities which amount to a disproportionate employment cost to loan size ratio and have high operating costs (Skowronski, 2007, pp. 5-6; MIX and CGAP, 2010, p. 22; Centre for Microfinance, 2010, p. 4). To offset these costs, many MFIs in South Africa offer loans in larger quantities (Skowronski, 2007, pp. 5-6; Baumann, 2001, p. 16). Thirdly, competition refers to other financial lenders. MFIs face competition from other formal lenders such as commercial banks who have the operational and support structure to offer more services at more locations and such banks usually charge a minimum deposit fee rather than a fixed deposit based on a percentage of the deposited amount that decreases the profitability of MFIs who count on numerous small deposits (Skowronski, 2007, p. 6). As for informal competition, numerous options exist but MFI loans typically are more advantageous in terms of lower interest rates and more flexible repayment options but since this is largely unknown to lower income families, much scepticism still exists (ibid, pp. 5-6). Lastly, human settlement refers to rural challenges. Many South African MFIs operate in rural areas and their respective loan-recipients oftentimes are spread out over vast areas therefore MFI markets are less dense and travel distances add to costs (Baumann, 2004, p. 794; Centre for Microfinance, 2010, p. 4). Also, many enterprise sectors are oversaturated in villages and locations where similarities in goods and services and the number of opportunities available make it difficult to enter the market (Baumann, 2004, p. 794).[8] Thus, it is said that productivity in reaching more recipients is significantly reduced (ibid). Since many people emigrate from other countries or migrate to urban areas, individuals lack the bonds of strong social networks that are so important for the security of solidarity-based lending that is used as social collateral (Skowronski, 2007, p. 6). Since microfinance faces many challenges within the South African context, there has been virtually no attention given to environmental impacts even though the country has a firmly embedded sustainable development (SD) agenda.

[8] For example, there are numerous vegetable and fruit stands, hair parlours and spaza shops all selling similar items or services.

1.5 Approach and Methods

This section describes and rationalizes the research method chosen and conducted in this dissertation. The section is ordered by first justifying the approach, then describing the design and followed by the data collection methods.

The selected methods for this research included:

- Compiling an inventory (*Phase one*)[9]; this list included development finance institutions (DFIs) and potential environmental partner organisations operating nationally (see appendices D and E),
- Literature Review; this entailed a critique of existing literature on sustainable microfinance (SMF) practices internationally to gain an in-depth understanding of SMF and insight for South Africa,
- Consulting nationally (*Phase two*); select organisations across South Africa were consulted to a provide context to the case study,
- Case Study (*Phase three*); one case was identified where a housing MFI was investigated in-depth.

1.5.1 Justification of the Approach

Qualitative research is an approach that encourages the understanding, describing and explaining of various social phenomena that occur in the world (Flick, 2007, ix). It is empirical or observable research where the data is not described by purely using numbers but mainly through words, explanations and descriptions (Punch, 2005, p. 5). Qualitative research was chosen for this study because the focus is on understanding and exploring particular phenomena within the context of microfinance. The numerical descriptions presented in Chapter 4 elaborate and support the qualitative data rather than solely describe the data itself.

1.5.2 The Case Study

Punch (2005, p. 144) states, "in keeping with other approaches in qualitative research, the case study aims to understand the case in depth, and in its natural setting, recognizing its complexity and its context." According to Yin (2009, p. 2), there are many ways to conduct social research each having its particular advantages and disadvantages which are dependent on three conditions: the type of research question, the control a researcher has over behavioural events and the focus on contemporary over historical phenomena and explains that case studies are the preferred research method when:

[9] Each phase is elaborate upon in section 1.5.3, the Case Study Selection.

- *(a) "how" or "why" explanatory questions or exploratory "what" questions are being asked,*
- *(b) the researcher has little control over the events being studied, and*
- *(c) the study is addressing a contemporary trend (ibid, pp. 1, 9).*

Additionally the case study approach is a comprehensive method that covers the design logic, data collection procedures and data analysis of a study (ibid, p. 18). Therefore, it is necessary to mention each condition as it related to this dissertation in order to justify the research strategy. (a) This research project has explored microfinance as a sustainable development practice within the South African context and asked three 'what' questions and two 'how' questions. The 'what' questions are exploratory in nature with "the goal being to develop pertinent hypotheses and propositions for further inquiry" (ibid). The 'how' questions posed are explanatory in nature and according to Yin are more likely to "deal with operational links needing to be traced over time..." (ibid). (b) In regards to the extent of control that the author had in this study, the author did not need control of behavioural events to conduct the research. The author merely studied the case as it occurred in real life. (c) This research explored a contemporary phenomenon in South Africa and did not focus on historical events. Hence, it is seen from the three main points above that a case study approach was appropriate for this dissertation, as it identifies aspects of sustainable microfinance (SMF) practices in South Africa. The case study approach has been widely critiqued due to its broad implications but the aim was to not generalize so much as to link factors of the case to the research assumptions and then determine the appropriateness for transferring the results to other cases (Punch, 2005, pp. 145-6).

1.5.3 Methods and the Case Study Selection

The literature review method was the first step of the research process to understand the concept of sustainable microfinance (SMF) and to determine suitable case studies. Due to the novelty of SMF, locating sufficient scholarship was challenging. The international literature discovered stems from research done over the past ten years and no literature on SMF in South Africa was located. The literature was compiled mainly through journal archives and databases from the university, through internet searches and through contact with some of the main scholars in the field.[10]The other methods (compiling an inventory, consulting nationally and the case study) consisted of a three-phase selection process to determine the case study organisation. While this research began with the aim of investigating MFIs across the country, it soon became evident through the selection phases that the concept of SMF is in its infancy so

[10] Archer and Goldsworthy are two of the scholars approached.

the research process experienced numerous dead-ends and failed attempts at gaining access to organisations. These challenges stemming from the research process contribute to a very important finding, that the concept of SMF is not yet considered in microfinance practice in South Africa. *Phase one* included engaging in a mapping exercise that broadly determined two categories: Development finance institutions (DFIs)[11] operating within South Africa, and potential environmental partner groups[12]. This was accomplished by reviewing the literature, talking to key players in the microfinance sector in South Africa and by investigating organisations' websites. The result of this phase was an inventory that compiled many of the DFIs and environmental organisations in the country (see Appendix D and E).[13]

Once this task was completed, *phase two* further narrowed the results by determining which MFIs had an environmental focus. This was done by reviewing organisational documents found on the internet and through basic email or telephonic correspondence with organisation representatives. This phase did not produce many possibilities but what did emerge was a national context that provided insight for the case study itself. The pursuit of this sample was sought to compliment the case study by providing broad insights by looking at a number of organisations not in a comprehensive manner but rather through mainly contacting one key person from an organisation. This process occurred through a 'snow ball' sampling method whereby speaking to one entity led to discovery of other pertinent entities and shapes important national findings. Thus, the national context to the case study was informed by semi-structured interviews and personal correspondence (through email or in person) with key players from eight organisations in the microfinance sector nationally including managing directors, a founder, a manager, a consultant, a regional representative and a group leader. The organisations consist of MFIs, an energy research group, a provincial conservation unit and a consultancy company and represent the Western Cape, Eastern Cape, Limpopo and Kwa-Zulu Natal Provinces of South Africa. Questions asked during the interviews sought to determine the importance of the environment to microfinance practices and inquired into the knowledge of sustainable practices that may be occurring and the successes or barriers based on the outcome of those responses. This sample became an important contributor in determining what is happening at the national level and while the case study organisation itself provides an in-depth look at the research topic, setting the national landscape was essential to strengthen the validity of the study.

[11] MFIs are a subset of development finance institutions (DFIs) where the DFIs were sought to provide a comprehensive inventory and accurate portrayal of the DFI sector in South Africa. No comprehensive database or inventory exists in South Africa from this sector.
[12] Environmental partnering groups that were included in the inventory were those that provide or could provide environmental expertise (technical or otherwise) to DFIs.
[13] This inventory is a comprehensive reference list for the benefit of other organisations within this field to be able to link to other organisations promoting sustainable practices.

In *phase three,* the final few cases were chosen that met the research criteria and were easily accessible.[14] From this last step, the identified organisations were approached and one was identified as the organisation that was willing to take part in this study as the in-depth case. The Kuyasa Fund (TKF) as a housing MFI that recently began introducing renewable energy (RE) loans to recipients became the case study. The focus on one case was beneficial in the sense that it allowed for a more in-depth view whereas spreading the analysis over many cases may have provided a superficial view. Data was gathered from TKF by way of 20 interviews with management, loan recipients, a loan collections officer, a customer service centre (CSC) representative and two partnering organisations; as well as through direct observation of the loan collections process and by way of reviewing organisation documents. The loan recipient sample is revealed separately because loan recipient's perceptions were not the focus of this research but the pursuit of their perceptions was meant to serve as an interesting narrative to enhance the understanding of the findings. General questions were posed to the recipients that investigated their perceptions of the environment and renewable energy (RE) loans and technology. With the assistance of one of TKF's loan collections officers (LCO), 13 loan recipients were approached. These loan recipients live in the Cape Flats locations of Cape Town (Nyanga, Guglethu, New Crossroads and KTC). Interviews were mainly conducted in isiXhosa with the LCO acting as translator over a three-day period.[15] The other interviews were semi structured, which were initiated by asking general questions about the relevance of the environment in microfinance. The questions sought to determine the importance of the environment to microfinance practices; the advantages and the challenges to considering the environment in microfinance; the reason behind using renewable energy technology; and the knowledge of sustainable microfinance (SMF) and whether it exists in practice.

[14] The case was selected by meeting the following criteria: situated within the definition of microfinance, located and operates in South Africa, addresses environmental issues and accessible by location and cooperativeness.
[15] Interviews were conducted on 11th, 15th and 23rd of February 2011.

1.6 Chapter Outline

The rest of the dissertation is structured as follows:

CHAPTER 1: this chapter has introduced the design and the key concepts of the study.

CHAPTER 2: focuses on the theory of sustainable development (SD) and a sustainable microfinance (SMF) framework was developed based on the literature.

CHAPTER 3: provides insights from experiences of SMF from international examples and implications for strategies for SMF in South Africa are highlighted.

CHAPTER 4: the framework developed in Chapter 2 focusing on four principles are tested in an empirical case study setting using national organisations and one housing MFI in Cape Town.

CHAPTER 5: The main conclusion to the study is drawn out focusing on the finding that SMF does not yet exist in South Africa although examples are beginning to emerge.

CHAPTER 2

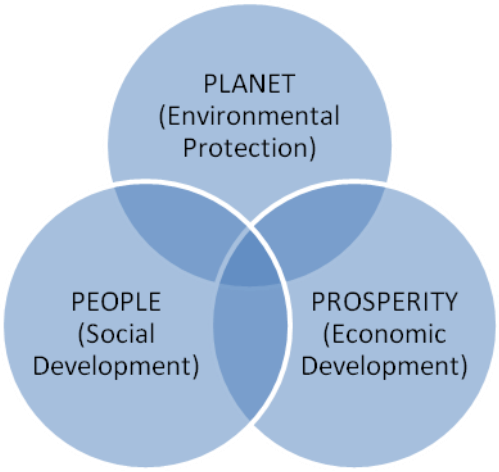
Sustainable Development: Conceptual Framework

The purpose of this chapter is to present the concepts and theory that inform this study. The link between microfinance practices and environmental impact is explored to understand the vulnerabilities faced by poor communities. The broader theory of sustainable development (SD) is used to pursue an understanding of sustainable microfinance (SMF) where a framework is developed and will therefore focus on the research question: *What is sustainable microfinance (SMF)?*

2.1 Sustainable Development

As mentioned in Chapter 1, the concept of sustainable development (SD) emerged in response to the crises created by human interaction with natural systems. Sustainability when addressing the environment refers to the ability to improve or reverse the over-exploitation of non-renewable resources and maintain these resources for future use. SD in its most basic sense is development that meets the needs of the present without compromising the ability to meet the needs of future generations (WCED, 1987) and recognises the interconnected and equitable nature of the social, economic and environmental spheres of society which form three pillars. Figure 2.1 epitomizes SD as the area where the three pillars intersect for it is here that SD principles that incorporate the three pillars in an equitable manner emerge.

Figure 2.1 Three pillars of sustainable development



The widely used and accepted visual representation of the intersection of the three integral pillars of society.

Tensions between the environment and that of humans (economic, political and social) are not new. The economic processes of capitalism and industrialisation are thought to have dramatically altered the relationship between the economic, social and environmental realms (Spaargaren and Mol, 1992, p. 327). Many scholars agree that economic benefits have largely been derived from depleting Earth's natural assets (Engel, Pagiola and Wunder, 2008, p. 664) and has therefore dominated other aspects of the intricate system (Spaargaren and Mol, 1992, p. 336). Society is made up not only of networks within social, political, cultural and economic realms but also between those of natural resources, ecosystems and animals which Carolan (2005a, p. 5) has refered to as horizontal and vertical integrations between all natural and social actors. Each and every aspect of these networks influence the others and have the ability to impose harm or benefit. To highlight this point, Giddens (1985) states humans "partake of the 'content' of the natural world, which human beings live both 'in' and 'with,' in a connection of symbiosis" (cited in Spaargaren and Mol, 1992, p. 327). The environment therefore is a contested term and one that is in many instances socially constructed (Ingold, 2000, p. 20; Carolan, 2005b, p. 394, 403). Human domination over natural systems has led to the commodification of nature and the unsustainable use of natural resources which has detrimental effects on each aspect of life.

Early economic theory (Kuznet's hypothesis) assumed that in the initial stages of growth and development, environmental quality must be sacrificed and would improve only once a certain level of growth was reached which led implementors of development during this time to view the environment as a luxury inevitably leading to the commodification of nature (Goldsworthy,

2008, p. 10; Dinda, 2004). But it was the 'Brundtland Report' and Agenda 21 publications that changed the way the international community addressed the environment in relation to economic growth. Before this, issues about the environment and growth were regarded separately but after these publications, these issues were seen as inseparable (ibid). The MDGs, or the targets set by the United Nations (UN) in 2000 to reduce poverty worldwide, are a prime example of strategies that cannot be met without the integration of environmental protection (Mainka, McNeely and Jackson, 2005, p. 8). Even though it is only Goal 7 of the MDGs that explicity promotes SD through targets aimed at reversing environmental damage, it is argued by many that achieving all of the goals requires a fully functioning ecosystem and that to truly reach sustainability (Goal 7), the support of the other Goals are needed (Mainka, McNeely and Jackson, 2005, p. 8; DEAT, 2006a, p. 9; Goldsworthy, 2010, pp. 454-5).[16]

Essentially in order to pursue SD, basic needs must first be met. Nowhere is this more pertinent than in poverty stricken Africa where abundant natural resources and critical ecosystems are under continual threat from global competition as resources become more scarce (Global Footprint Network, 2009, p. 3). The ecological footprint or the measure of human demand on the biosphere (productive area) calculated using resource use and absorbtion rates for the world has overshot the earth's natural capacity[17] but yet is significantly lower in Africa meaning that the majority fall short of meeting their basic needs (ibid). Even though SD aims to satisfy human needs for those at the bottom of the pyramid (BoP), simultaneously it increases consumption levels of that very population (Langhelle, 1999, pp. 133, 137) therefore the general consensus is that natural resources are being depleted at a faster rate than are renewed where development is concerned. "The 'principle development challenge' is thus to meet the needs of an expanding developing world population within a context of global ecological interdependence" (WCED, 1987, p. 54, cited in Langhelle, 1999, p. 137). Amid the the pursuit of sound environmental principles to ensure SD, the 'Brundtland Report' highlights the relationship between poverty and natural resource degradation.

2.2 Poverty and the Environment Nexus Debates

Within sustainable development (SD) there are key debates surrounding the relationship between the causes of poverty and that of environmental degredation. Very few scholars support the idea that environmental protection improves as poverty is reduced through economic growth (Goldsworthy, 2008, p. 11). Habits of other socio-economic groups in society,

[16] See Appendix A for more information.
[17] According to Smith and Hartnack (n.d., p. 4), it would take 1.2 earths to support the world's population and consumption patterns.

namely the rich, are largely ignored (DFID, et al., 2002, p. 28) and habits of the poor become central. The majority of scholars rather view environmental issues as continuing despite efforts to reduce poverty. One position holds that poverty is a major contributor to environmental degradation and therefore in order to address environmental concerns, poverty has to be tackled first (Duraiappah, 1998, p. 2169). This is largely maintained by Malthusian scholars such as those of the 'Brundtland Report' and World Bank. Another debate demonstrates that in fact this previous view does not consider the complexities of poverty and the environment that reinforce one another (ibid).[18] Both of these debates have emerged in reponse to contemporary development challenges. Malthus and Boserup postulate opposing theories on population sustainability when faced with a case where population growth surpasses natural resources but both emphasize the direct relationship that exists between population and the environment (Marquette, 1997, p. 1). The former is based on the law of diminishing returns where a growing population puts increasing demand on the availability of resources leading to the cultivation of marginal lands which produce low yielding results (Urdal, 2005; Aggrey, et al., 2010, p. 83). The latter is based on incentives where an increasing population leads to technological innovation to increase food production in order to meet population demand (Marquette, 1997, p. 1).

2.2.1 Malthusian Perspective

Amongst some scholars, there is a consensus that poverty causes environmental degradation (Duraiappah, 1998; Aggrey, et al., 2010). The poor are highly dependent on the local natural resource base for their survival and tend to pursue immediate consumption needs at the expense of long-term interests[19] (Aggrey, et al., 2010, p. 84). This view holds that poverty is a major cause of environmental destruction because the poor are short-term 'maximizers' and do not uphold sustainable practices (Araya and Christen, 2003, p.5). The poor are vulnerable to environmental degradation since they rely so heavily on natural resources, have fewer alternatives, are exposed to environmental hazards and are least able to cope with such risks (Yusuf, 2004, p. 2). Literature in this school usually refers to the 'vicious cycle' of poverty and the environment inspired by Malthus that assumes poverty stressors can force people into more destructive practices (Aggrey, et al., 2010, p. 83). The Malthusian school also suggests that competition for diminishing resources will lead to poverty, degradation, reduced income and population control (Tiffen, 1995, p. 32). There is not much empirical evidence that supports this view and many factors that contribute to these issues are largely ignored (Duraiappah, 1998).

[18] This debate is held by the likes of Mortimore, Tiffen, Boserup, Duraiappah and other scholars.
[19] Yusuf (2004, p. 15) defines this as the discount rate where the willingness to trade current benefits outweighs future gain.

2.2.2 Boserupian Perspective

There is a rising trend in the literature that contests the previously mentioned debate and emphasizes the multidimensional nature of poverty and the environment (ibid, p. 2169). This argument refers to the fact that the poor generally do not have the resources or the means to cause environmental degradation especially on a large enough scale to effect noticeable damage (Aggrey, et al., 2010, p. 82). Instead, the literature reveals demographic, cultural, institutional, political and social factors as important contributors to development issues (Duraiappah, 1998, p. 2169). In fact, the notion that it is not poverty that causes environmental degradation but the combination of greed, power, wealth and institutional as well as market failures is apparent (ibid, p. 2170). In this sense, these factors can intensify poverty issues that then cause environmental degradation (ibid). Duraiappah (1998, p. 2172), emphasizes that environmental degradation can only cause poverty if it is firstly influenced by other factors and the research concludes, 90 percent of the studies show poor communities engaging in degrading the environment but of those, only ten percent chose these activities purposefully whilst 90 percent had no choice but to use natural resources unsustainably. This supports the view that the poor do not actively degrade the environment on their own accord but are forced to due to exogenous factors. Many studies have proven Malthusian debates false and suggest rather that local adaptations enhance both livelihoods and environmental protection simultaneously (Batterbury and Forsyth, 1999, p.4).[20] Ultimately the Boserupian perspective demonstrates that the intensification of techniques which combine labour and natural resources lead to land improvements (Mortimore and Tiffen, 1994, p. 997). This section has provided both of the key debates found in the literature on sustainable development (SD) but this study argues that it is the notion of complex interactions between poverty and the environment and the incentives that facilitate change in systems which will lead to the development of sustainable microfinance (SMF). Ultimately by changing power structures and institutions, poverty reduction and environmental protection can be achieved.

2.3 Sustainable Microfinance (SMF)

Recently a new trend has emerged that realizes the importance of considering the environment in microfinance activities, which incorporates a holistic approach in moving towards sustainability. Until recently, MFIs were not aware of the industry's impact on the environment or how to mitigate it (Lal and Israel, 2006, p. 357). The growing trend to finance agriculture for

[20] Satterthwaite's (2003, pp. 73-86) research shows that poor communities contribute very little to unsustainable consumption of natural resources. Mortimore and Tiffen's (1994) study from the Machakos region in Kenya found that soil conservation and economic activities result in poverty reduction and less damage to the environment and in Nepal, farmers use landslides to improve degraded soils (Batterbury and Forsyth, 1999, p. 1).

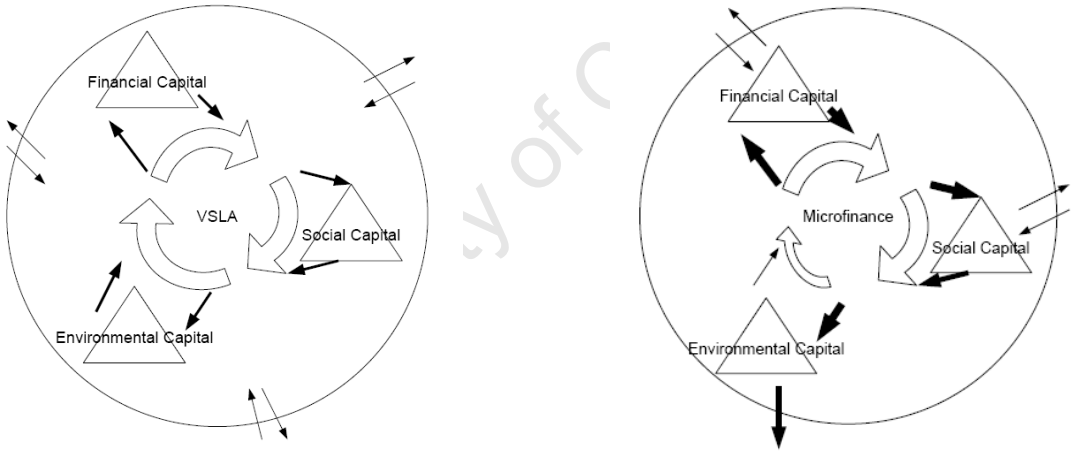
instance has put an increasing demand on food production located on marginal land leading to habitat loss (ibid) and many enterprises assisted by microfinance impact the environment directly leading to local environmental challenges (Goldsworthy, 2010, p. 460). Goldsworthy (2008, p. 19) concludes that this is due to the microfinance industry maintaining a closed system. By this she means that the emphasis is on the process of money (grants and donations) moving through the system as loans and producing an output (profits) which assumes that the functions carried out are financial with only financial repercussions (ibid). In actuality the system is open with the environment being relevent to the activity base but since the concept of environmental sustainability is still new, the system is not yet able to respond to the negative feedback loops caused by degradation and resource scarcity (ibid). However, microfinance is considered a viable tool in the process of achieving sustainable development (SD) that facilitates both social and environmental gains. This is argued because MFIs are well-suited to address the environment in practice since it is relevant to their activities. Rippey (2009, p.3) argues that MFIs have the distribution channels (bottom of the pyramid base), the recipients (who use natural resources), linkages (good relations with government), credibility (regulated industry) and efficiency (profitability) to help reach millions of people. In this sense, microfinance has the opportunity to help the most vulnerable populations adapt by means of accumulating and managing assets to ensure ways of coping to changing environmental conditions (Hammill, Matthew and McCarter, 2008, p. 114).

Unlike sustainable development (SD) where the three pillars are equal, sustainability in microfinance is seen as a step ladder with prosperity on the bottom rung that then leads to social aspects on the middle rung and finally the top rung, the environment, to be reached only after the other two are satisfied. This study challenges that notion and advocates for the equality of the three pillars which is supported by the literature. Sustainable microfinance (SMF) therefore incorporates the essence of the triple bottom line (TBL)[21] and upholds principles of SD or rather ensures people, profits and planet have equitable consideration in microfinance practice (Goldsworthy, 2008 & 2010; Archer, 2009). It also encompasses the use of service provisions or incentives by MFIs to influence the sustainable use of natural resources and to mitigate the negative environmental impact of recipients and the industry at large (Khan, 2010). Part A of Figure 2.2 represents the ideal balance between environmental, social and financial capital that define SD. The large circle is the household or village unit and the arrows pointing in and out of the circle represent the flows in and out of the unit. By enhancing all three forms of capital simultaneously, sustainable development occurs since each area relies on the other resulting in a beneficial cycle of increasing environmental, social and financial assets. Part

[21] The TBL in this case refers to sustainability reporting where an organisation accounts for social, financial and environmental performance (FMO and Triodos Facet, n.d.; Starobin, 2008).

B of Figure 2.2 represents what happens when environmental capital is not protected. As environmental capital flow diminishes, the other two capitals also diminish. As a result, if environmental capital is neglected then assets can flow out of the unit, which leads to financial and social assets also diminishing over time (Wild, Millinga and Robinson, 2008, p. 32). Microfinance practice currently exemplifies Part B of Figure 2.2, which is the gap this research aims to bring to light, but it is Part A that demonstrates reaching true sustainability that this research is striving to determine within the South African context. "No matter how well your vehicle is gassed, oiled, and tuned, it will not take you very far if there are no roads (natural resources), or if those roads are so degraded they cannot be used" (Goldsworthy, 2010, pp. 452, 455). In this analogy, the environment represents the means whereby microfinance can achieve its social ends. It also demonstrates that if environmental capital is ignored, social and financial assets tend to diminish over time. This link to SMF is a way for microfinance to respond to environmental issues while increasing social and financial capital simultaneously.

Figure 2.2: Sustainable Microfinance (SMF)



A: Microfinance as a tool for Sustainable Development

B: Potential Risk if Microfinance Ignores Environmental Issues

Recognizing environmental capital as integral to a balanced system.

Source: Adapted from Wild, Millinga and Robinson, 2008, p. 32.[22]

2.4 Sustainable Microfinance (SMF) Framework

Goldsworthy (2008 & 2010) has identified six 'theoretical justifications' for considering the environment in microfinance. Along similar lines, Archer (2009) has identified four 'ethical

[22] In their Kenyan study, Wild, Millinga and Robinson (2008) use Village Saving and Loan Association (VSLA) interchangeably with microfinance. Microfinance is the umbrella term and VSLA is one of the approaches.

rationales' for including environmental protection in microfinance services (MFS). Together with other scholars, these justifications and rationales have been adapted by the author and identified as forming an important framework for the study. These 'principles' are elaborated below to form the framework for including the environment to promote sustainable microfinance (SMF) in South Africa upon which the research is based:

- Principle 1: Relevance to the Poor,
- Principle 2: Relevance to Women,
- Principle 3: Relevance to Livelihoods and Business,
- Principle 4: Relevance to Vulnerability and Future Sustainability

2.4.1 Principle 1: Relevance to the Poor

The relationship between the environment and those experiencing poverty is felt in both directions. In a practical sense, the environment influences the well-being, health, livelihoods, vulnerability, autonomy and survival of the poor (Goldsworthy, 2010, p. 455; DFID, et al., 2002, p.7). As previously mentioned, poverty studies have shown that people at the bottom of the pyramid (BoP) tend to be located on marginal land that are most severly effected by natural disasters and as a result, degraded resources perpetuate impoverishment (Goldsworthy, 2008, p. 12). Much of this relevance to the poor has been explained through the debates described earlier in the chapter regarding the poverty and environment nexus.

One of the major concerns that emerges in the microfinance literature is the concept of needs. The concept of needs is upheld in the definition for sustainable development (SD) and forms an important aspect of achieving sustainability. The needs concept was coined by Maslow (1943) which extended the traditional notion of economic development theory to a poverty focus measuring quality of life (QOL) (Hagerty, 1999, pp. 251-2).[23] Achieving these basic needs are the essential foundation for poverty alleviation and economic development (Archer, 2009, p. 39). Max-Neef (1991, p. 17), states that human needs (the needs of Being, Having, Doing and Interacting and those of Subsistence, Protection, Affection, Understanding, Participation, Idleness, Creation, Identity and Freedom) must be understood as a system where all needs interact and are interrelated with the exception of subsistence needs where no hierarchies are present. He further proposes that fundamental human needs are the same across all cultures

[23] QOL is dependant on the opportunities people have to satisfy their needs and poverty is indeed any fundamental human need that is not met that determines QOL (Max-Neef, 1991, pp. 16, 18). According to Maslow (1943, p. 18), there are five basic needs (Physiological, Safety, Belongingness, Esteem and Self-Actualization) that are related to each other but are arranged in a hierarchy where once one category of needs are satisfied, the next level can be achieved.

and throughout history but what differs is the ways in which needs are satisfied (Max-Neef, 1991, p. 18). Many scholars believe that the poor are driven to use natural resources unsustainably because of immediate consumption and income generation needs (attached to basic needs) so the land is oftentimes used extensively and continuously (Goldsworthy, 2008, p. 14; Lal and Israel, 2006, p. 359). In this sense, meeting basic needs takes precedence over considering the environment. Archer (2009, pp. 39, 72) makes this connection with microfinance where he notes that microfinance provides basic physiological needs to recipients which in a contemporary context translates to enabling people to meet their housing, electricity, sanitation and transport requirements. In other words, assisting recipients in improving their quality of life (QOL) means that first, fundamental needs must be met before other needs (considering the environment) can be pursued.

Summary of key criteria

These are the points that summarise the key critera under Principle 1 of SMF:

- The poor rely heavily on the use of natural resources for subsistence and livelihoods,
- The poverty and environment nexus does not escape the microfinance industry,
- Meeting loan recipient's fundamental needs leads to improving QOL as well as environmental conditions.

2.4.2 Principle 2: Relevance to Women

The environment plays a unique role in the lives of women and children in their care. Studies have shown that poor, rural women bear the brunt of environmental challenges (DFID, et al., 2002, p. 14) because they interact so intimately and frequently with nature. The reason that women are in this position stems from gender specific roles. In many developing world contexts, these roles dictate that women's responsibilities are tied to the environment (Archer, 2009, p. 73). Since "women are the engines of production in the domestic sphere" (Goldsworthy, 2010, p. 457), it is important for microfinance to understand the wide variety of roles women occupy especially since the majority of the loan recipients are female (Lal and Israel, 2006, p. 360). Women are the largest gatherers and users of forest products compared to men and many are involved in agricultural activities (Lal and Israel, 2006, p. 360). These products are used for subsistence and income and include food, water, fuel wood, medicine, building materials and fodder (Lal and Israel, 2006, p. 360; Goldsworthy, 2010, p. 457). Destruction of local natural areas leads to growing resource scarcity that impacts on women's time and energy, making their responsibilities more challenging. Women then have to spend more time and energy travelling further distances to collect these products (Lal and Israel, 2006, p. 360; Goldsworthy, 2010, p. 457) which takes away valuable time and energy that could be spent on other

responsibilities such as educating their children, income generation, subsistence farming and improving the health of their household (Archer, 2009, pp. 73-4; DFID, et al., 2002, p. 14). An additional concern is that women and children spend much of their time indoors where exposure to indoor air pollution from smoke pose serious health risks (DFID, et al., 2002, p. 16). Since women constitute most of microfinance recipients, understanding the relationship between women and the environment becomes a crucial step in improving women's lives and by protecting the environment.

Summary of key criteria

These are the points that summarise the key critera under Principle 2 of SMF:

- Women bear the brunt of environmental challenges due to gender specific roles,
- Understanding these roles in relation to natural resources is important for microfinance considering the majority of recipients are female,
- Ignoring such factors leads to increased time and energy spent for women as well as increased negative health effects for themselves and their families.

2.4.3 Principle 3: Relevance to Livelihoods and Business

Since the environment is a necessary part of life and everything engages the environment in some way, productive activity and subsistence cannot occur without the environment as a source of inputs or a sink for outputs (Goldsworthy, 2008, p. 13) therefore enterprises, livelihood activities and businesses all draw from the environment in some way. Considering the environment is a way to determine enterprise impacts so as to sustainably draw from the local natural resource base and for MFIs to ensure financial sustainability. Goldsworthy (2008, p. 9) warns "taking for granted that the small-scale entrepeneurial activities financed by the microfinance industry will not engage the natural environment is a dangerous assumption, not only for the portfolio of the microfinance organisation, but also for the livelihoods of the people." Hence if the industry ignores the environment, it does so at its own peril (Goldsworthy, 2010, p. 455). Much of the literature focuses on the fact that millions of individual bottom of the pyramid (BoP) enterprises can have an enormous impact on the environment cumulatively (Goldsworthy, 2008 & 2010; Archer, 2009; FMO and Triodos Facet, n.d.). Enterprises can have negative impacts in many ways; they oftentimes cause direct harm to human life through the use of hazardous substances such as pesticides and chemicals and in many cases contribute to habitat loss, deforestation and degradation and pollution (Pallen, 1997; Goldsworthy, 2010, p. 457; Archer, 2009, p. 8). In many cases, land degradation occurs from cultivating marginal land. The Law of Marginality states, "marginal soils cultivated with marginal inputs produce low yields and therefore poor livelihoods. This cycle must be broken to conserve the land and reduce poverty" (Unknown, cited in Lal and Israel, 2006, p. 359). Therefore many enterprise

activities, especially those with a direct link to the natural resource base are at risk of causing major harm to the local environment.

There are many reasons as to why microfinance should be concerned with the environment in relation to enterprises and livelihoods. There are natural limits as to how much economic and productive activity a local environment can support so the challenge for microfinance is to support activities that are better suited to the natural resource base (Pallen, 1997). Also profitability can be severely compromised by poor workplace environmental health and safety standards which can cause much harm to people (Pallen, 1997). Furthermore, MFIs could face more defaults on loans caused by natural resource degradation resulting in a reduction in loan recipient productivity and profitability, meaning that MFIs may never reach true sustainability if local environmental conditions are ignored (Goldsworthy, 2008, pp. 14, 15). Enterprises that harm the environment could undermine the opportunities for the microfinance recipient (Archer, 2009, p. 68). Enterprises that contribute to positive impacts on the other hand have the opportunity to restore the environment. One example is that from Peloquin's (2008, p. 2) research in Bangledesh where 200 women developed environmentally sensitive enterprises that use natural resources sustainably to enhance and diversify livelihood options. Since every activity engages the environment, businesses, enterprises and livelihoods are all effected by the condition of the environment.

Summary of key criteria

These are the points that summarise the key critera under Principle 3 of SMF:

- Since every activity draws from the environment in some way, ignoring environmental issues leads to increased costs,
- Microfinance supports millions of risky enterprise activities that have negative environmental impacts,
- It makes good business sense to consider the environment.

2.4.4 Principle 4: Relevance to Vulnerability and Future Sustainability

It is important for microfinance to consider the environment merely for the sake of the reducing vulnerabilities of recipients and for future environmental sustainability. The literature is saturated with examples of the the importance of microfinance reducing vulnerabilities associated with environmental issues of recipients. In order to sustain livelihoods, DFID, et al. (2002, p. 11), recognize that the poor need to have options to diversify natural resources in the face of environmental changes. It is therefore believed that microfinance has the ability to reduce poverty and empower communities to make them less vulnerable to environmental threats such as climate change and degradation leading to positive impacts on the lives of the

poor as well as the environment (Goldsworthy, 2008, p. 4). Microfinance in this sense can improve the 'adaptive capacity' and simultaneously reduce the vulnerabilities of the poor to environmental events (Dulal, et al., 2010, p. 630). Hammill, et al. (2008, p. 115) claim "the logic here is simple - the more assets people have, the less vulnerable they are." And since microfinance serves the bottom of the pyramid (BoP), the opportunity exists to link adaptation strategies (ibid, p. 113).

Summary of key criteria

These are the points that summarise the key critera under Principle 4 of SMF:

- Microfinance can make the recipients they serve less vulnerable to environmental threats by improving the adaptive capacity,
- By increasing recipient's assets, this leads to a reduction in vulnerability,
- Considering natural resources now will meet the needs of the future.

2.5 Conclusion

Sustainable microfinance (SMF) is one potential development approach to address issues of sustainability. This chapter has shown that SMF draws from the theory of sustainable development (SD) which refers to development that improves the exploitation of natural resources to meet the needs of the present without compromising meeting the needs of the future (WCED, 1987). This theory recognises that the environmental, social and economic aspects of society are highly dependent, interrelated and equal. Until recently, sustainability in microfinance has focused on meeting financial and social goals, excluding the environment. SMF incorporates the environment into the existing structure that insures planet, people and prosperity are considered equally in microfinance practice (Goldsworthy, 2008 & 2010; Archer, 2009). It is argued that if environmental capital is ignored, social and financial assets tend to diminish over time (Wild, Millinga and Robinson, 2008, p. 32). Therefore SMF can be achieved through the use of service provisions or incentives to encourage the sustainable use of natural resources and to mitigate the negative environmental impacts of loan recipients and the industry (Khan, 2010). Based on the literature, a framework for SMF was developed where the relevance of the environment in microfinance was contingent upon four principles: the poor; women; livelihoods and business; and vulnerability and future sustainability. This framework was important for advocating the environment in microfinance practice.

Poverty has been linked to environmental degradation. Whether this is contested (as in the Boserupian view) or supported (as in the Malthusian view) is another issue. What remains evident is that regardless of the position one takes, environmental sustainability has been

regarded as a poverty problem and dumped on poor communities to deal with. Development approaches have been set on addressing this link where poverty is used to undertake complex issues. Even though microfinance has social objectives and serves the poor, it is still part of a capitalist system where in order to operate, profits must be generated. Oftentimes this blurs the line between a social driven and profit driven sector that actually depends on the indebtedness of poor people to function. This has been an attempt at understanding human and environmental relationships against the backdrop of sustainable development (SD) and then considering the reasons why the third pillar, the environment, is important for improving the lives of the bottom of the pyramid (BoP). As we have seen based on the framework, there are four major reasons to consider sustainability in microfinance practice but many questions remain unaswered due to the novelty of the evidence. Will loans to recipients really help address sustainability or will it increase debt and therefore vulnerability of poor people ultimately leaving them worse off? It seems too early to tell but it is no secret that natural forces play an incredible role in poverty stricken communities and thus the paradox exists where the natural resources that poor communities depend on are the very resources that make them vulnerable to environmental shocks. The synergy between poverty and the environment is gaining in recognition with much attention now being devoted in the literature to the importance of considering the environment in microfinance practices and many scholars and practitioners in the field believe that the industry will move in the direction of sustainability during the next few years. These considerations are beginning to take place in international dialogues. In November this year, the 2011 Global Microcredit Summit to be held in Spain, which will bring together over 2000 participants from more than 100 countries will support practitioners and stakeholders of microfinance in utilising microfinance as a way to reduce poverty worldwide.[24] Although the environment is not a prominent feature at this Summit, two of the six cutting edge plenary sessions will discuss the importance of climate change on rural livelihoods and microfinance which makes huge inroads in the move towards sustainable microfinance (SMF). Chapter 3 will expand upon the literature to provide insights for SMF in South Africa from international experiences.

[24] http://www.globalmicrocreditsummit2011.org

CHAPTER 3

Sustainable Microfinance Unearthed

This chapter provides a review of the literature on sustainable microfinance (SMF) found internationally with the purpose of identifying the strategies for incorporating the environment in microfinance practices as well as to draw insight from and highlight opportunities for SMF in South Africa that addresses the research question: *How can microfinance adopt principles of sustainability in practice?* This chapter does so by identifying the ways in which microfinance can move towards sustainable principles. The research concludes that there are many opportunities for microfinance to incorporate sustainable principles and that insight for South Africa is abundant from SMF experiences around the world. Literature on SMF is largely from South East Asia (India and Bangladesh), Latin America (Brazil and Nicaragua), parts of Africa (Kenya and Uganda) and North America (U.S.A. and Canada).

3.1 Sustainable Strategies in Microfinance

Sustainability in microfinance as identified by the literature reveals two major opportunities, which are interrelated: the influence of MFIs on operational practices or through the practices of microfinance recipients.[25] Characteristics of sustainable microfinance (SMF) as influenced by MFIs are illustrated by two categories namely: operational practices and expansion into new service areas. Characteristics of SMF as practiced by recipients include decisions made on individual, household and enterprise levels.

3.1.1 MFIs & Operational Practices

Given that natural resources are an important part of the recipient's asset base that affects productivity, it only seems responsible for MFIs to adopt a holistic approach that considers the environment. Otherwise, MFIs face the risk of project viability and securing repayments since as profits decrease, financial sustainability is threatened (Goldsworthy, 2010, pp. 456-7). Sustainable operational practices include incorporating sustainable principles into the policies and practices of the organisation.

[25] Archer, 2009; Goldsworthy, 2009, 2010; Wenner, Wright and Lal, n.d.; Nishat, n.d.; Hall, et al., 2008; Khan, 2010; Dowla, 2009; Hammill, Matthew and McCarter, 2008; Rippey, 2009; Mohiuddin, 2006; Morris, et al., 2007; Hall and Lal, n.d.; Pallen, 1997; Herrold-Menzies, 2008; Teutsch, 2009; Starobin, 2008; Wild, Millinga and Robinson, 2008; GMf, 2007 and 2008; Lal and Israel, 2006.

First, considering the environment in microfinance practices makes good business sense. No productivity can occur that does not involve nature in some way; either through inputs or a sink for outputs (Goldsworthy, 2010; Hall and Lal, n.d.; Starobin, 2008). Degraded natural assets lead to less income resulting in recipients being unable to repay loans which leads to a loss of capital for MFIs. MFIs are then unable to maintain financial sustainability, improve and increase service products for recipients thus not achieving the social mission by failing to serve the very population it aims to help. Therefore, creating a win-win situation is mutually beneficial. Second, measures of sustainability can be fabricated into existing policies and practices (Hall and Lal, n.d.; Rippey, 2009; Starobin, 2008; Wild, Millinga and Robinson, 2008). Working within existing structures is suggested to build upon the organisation's strengths and work within its constraints to ensure a relevant and easy transition when new policies and services are developed. Third, environmental awareness and education are important for both employees of MFIs and recipients (Hall and Lal, n.d.; Starobin, 2008). Information on health and safety risks caused by environmental issues as well as general information about the environment is vital for creating awareness. Possible ways through which education can be emphasized is through training programmes and environmental pocket guides for fieldworkers. Fourth, MFIs can be a model of sustainable behaviour (Rippey, 2009). A good first step is looking inward to the practices of the organisation. Environmentally friendly practices such as recycling and utilizing renewable energy (RE) are easy ways for MFIs to model this behaviour. This will encourage the organisation to be a leader for other organisations and recipients. It can also help to improve the image of the organisation, which might assist in securing alternative donor funding.

Fifth, partnering and networking are central to improving environmental conditions (Morris, et al., 2007; Pallen, 1997). Finding other organisations (environmental groups, multilateral or bilateral donors, embassies, municipalities, science and research groups, communities, businesses, NPOs, CBOs and other MFIs) that can complement the MFI by providing environmental expertise and technical support can increase the outreach of the organisation. In collaborating, it is vital to search for partners with a common vision, a good reputation and local market presence. Sixth, people-centred development approaches are seen as a necessary step to achieving social objectives (Wild, et al., 2008; Pallen, 1997). Including people by integrating local knowledge and practices ensures the sustainability of projects. Areas such as capacity building, community based natural resource management (CBNRM), resource mapping and landscape analysis all contribute to environmental sustainability. Finally, MFIs can conduct extensive market research (Hall, et al., 2008, p. 12; Pallen, 1997, p. 27). MFIs can learn the biophysical make-up of the areas in which they operate. The local environment's capacity to absorb waste emissions can be considered as well as sustainable harvest rates. Other areas of

consideration are knowledge of landscape, wildlife, biodiversity, endangered species, local politics and practices that offer insight into environmental management of the area.[26] Overall, MFI strategies to include sustainable principles have been identified as making good business sense, being sustainable, providing environmental education, modelling behaviour, collaborating and networking, people-centred development approaches and conducting market research.

3.1.2 MFIs & New Service Areas

Another strategy for sustainable practices available to MFIs is the expansion into new service areas by adapting or creating new products and services. This includes loans, savings, insurance, remittances and business development services that consider the environment.[27] The potential recipient market is vast and untapped with only 2.5 per cent of the target population being reached by MFIs globally with Asia being the leader in both number of recipients and depth of outreach (Morris, et al., 2007, p. 13). MFIs have the opportunity to tap into the 97.5 per cent of the population that has not yet been reached by microfinance services. Reaching this population could unleash numerous opportunities for the industry.

The first service is through loans. Traditionally, loans were meant for income generation and enterprise development. Including environmental issues allows loan products to be appropriately designed to local contexts and for environmental costs to be covered by recipients (Morris, et al., 2007, p. 13). Loans can address environmental concerns through the type of loan offered and through lending criteria. Many studies have identified three types of loans that can help address environmental concerns. These are: loans for enterprise development or income generation; loans for consumers; and loans for housing. Loans for enterprise development or income generation are a traditional loan form that can be adapted to meet the environmental needs of the enterprise. A new loan product is the consumer loan where individuals or households are able to access credit to secure assets to climate-proof loans[28], diversify and increase income sources and decrease vulnerabilities to environmental threats. Housing loans provide the opportunity for recipients to upgrade to renewable energy (RE) sources, expand current housing structures and ensures rebuilding with sturdy designs if the structure is damaged due to natural disasters (Dowla, 2009, p. 20; The Kuyasa Fund, 2010).

[26] An example would be the Mennonite Economic Development Associates (MEDA), an NGO based in the US and Canada that established an environmental policy to comply with the Canadian Environmental Act and in doing so, trained staff and partnering MFIs in EIA and included a decision scheme for the loan application. (GMf, 2006, p. 8).
[27] Archer, 2009; Pallen, 1997; Dowla, 2009; Goldsworthy, 2008; Hammill, Matthew and McCarter, 2008; Morris, et al., 2007; Starobin, 2008; Khan, 2010; Hall, et al., 2008; Araya and Christen, 2003
[28] Climate-proofing loans refers to loans where climatic conditions are considered in the conditions and repayment options for the loan. This could mean being flexible on repayment after a severe storm or offering insurance for livestock as examples.

For example, the Self Employed Women's Association (SEWA) in India offers housing loans to repair or replace roofs, reinforce walls or rebuild in less hazardous areas all of which can be instrumental for reducing vulnerability to natural events such as floods, drought and storms (Hammill, Matthew and McCarter, 2008, p. 117). Dowla (2009, p. 23) emphasises the importance of local knowledge in the generation of new ideas for loan products. This is vital for creating new products that can build the adaptive capacity of the recipients that are relevant to the community.[29] MFIs have the opportunity to utilize local knowledge that can inform projects and develop standardized loan products.

Table 3.1: Loan Priority Matrix

Loan Recipient's financial gains/ improvement ↓	**Microfinance activity's impact on environment →**	**Low/ Positive**	**High/ Negative**
High		Economically supportive & environmentally sustainable **FUND**	Economically supportive but environmentally unsustainable ?
Low		Economically unsupportive but environmentally sustainable ?	Economically unsupportive and environmentally unsustainable **DO NOT FUND**

A tool for MFIs to determine the impact of recipient's enterprises on the local natural resource base. Source: Adapted from Goldsworthy, 2008, p. 20.

Lending criteria are the conditions of eligibility for obtaining and keeping a loan. Traditionally it has included such conditions as maintaining a women majority, having citizenship, meeting a certain age requirement, meeting a certain income group (part of the target population), intention of starting an enterprise or upgrading an existing one and participation in group solidarity as a guarantee (Archer, 2009, p. 77). Some elements of environmental protection in lending can include: screening recipients to determine environmentally friendly versus unfriendly enterprises; voluntary or imposed compliance to methods such as environmental education and mitigation measures; Environmental Impact Assessments (EIA) throughout the duration of the loan; increased flexibility with loan repayment schedules and the ability to renegotiate the loan terms during times of crises caused by natural events; increase the length

[29] Dowla (2009, p. 23) points out that in Bangladesh, farmers use water hyacinths that are found in abundance to build floating gardens that produce nitrogen and compost. Once this base is built up, farmers are able to grow vegetables on the water garden.

of loan period to provide a longer term of repayment to account for natural crises; and incentive schemes such as lower interest rates for environmentally friendly practices. This can be seen in Nicaragua where a local MFI offers loans at lower interest rates to farmers who practice sustainable soil and water management (Hammill, Matthew and McCarter, 2008, p. 120). Although environmental protection in lending criteria is a new concept internationally, many MFIs around the world are looking to adopt environmental protection in lending criteria. However in practice only 10 per cent of the total MFIs found in one study included environmental protection language in their lending criteria (Archer, 2009, pp. 71, 86).[30]

Screening recipients is perhaps the most important tool for MFIs to determine the environmental suitability of the enterprise the loan supports. Table 3.1 is a practical tool that can be used to prioritize recipients seeking loan funding. The matrix categorizes microfinance activity according to its impact on the environment and its economic capacity to improve quality of life (QOL) in this example but can be tailored to include other important variables depending on the contexts and needs of the MFI (Goldsworthy, 2008, p. 20). Wenner, Wright and Lal (n.d.) introduce another scheme that MFIs can utilize as seen in Table 3.2. Here the MFI starts with a pre-established list of the worst offenders (the most environmentally damaging activities). If a project is not found on the exclusion list and has little environmental or occupational safety risk, then the loan can be processed in accordance to exisiting lending criteria. If some environmental risk is found, then appropriate mitigation measures are required to continue with the loan. Depending on the size of the enterprise, additional measures like EIA or environmental due diligence is proposed. This would include site visits and assessments based on the amount of pollution or occupational safety risk and the effectiveness of mitigation strategies. Wenner, Wright and Lal (n.d., pp. 114-15) suggest that each enterprise be minimally monitored according to selected environmental and occupational health and safety variables. The application, appraisal, disbursement, monitoring and reporting processes include assessments based on environmental and social (E&S) risks and how to manage loans accordingly in another example of how to couple environmental and social issues in the loan cycle (FMO and Triodos Facet, n.d., p.5). Loans that have higher E&S risks may be assisted through education and improvement suggestions or through conditions set forth in loans (ibid).

[30] Archer's study (2009) looked at approximately 40 organisations through an investigation of their websites.

Table 3.2: Environmental Consideration Loan Scheme

Project on Exclusion List (no mitigation strategy)	→	Yes	→	Reject
Project on Exclusion List (with mitigation strategy)	→	Yes	→	Conduct EIA and consider
Project has little environmental impact	→	Yes	→	Process and monitor

Another loan tool for MFIs looking to consider the environment. Source: Adapted from Wenner, Wright and Lal, n.d., p. 114.

Acceptable examples of environmentally responsible enterprise areas include: bicycle production; biodiesel generation; agriculture (such as organic farming and aquaculture using green inputs); furniture made from recycled materials; green architecture; recycling; hazardous waste clean-up; indigenous landscaping; renewable energy (RE) technology manufacturing, installations and repairs (including clean cookstoves, LED lighting and solar photovoltaic (PV) systems); sustainable charcoal production; spekboom plant growers; parks and green space maintenance; public or green transport initiatives; eco-tourism; and rainwater harvesting (Posner, 2009). Unacceptable examples and worst environmental offenders in industry and enterprise include: leather tanning; brick and tile making; chemical intensive agriculture and aquaculture; metal working; small-scale mining; painting and printing; automobile repair; wood processing; charcoal making; textile dying; food processing; trade in rare or exploited crafts or plants; animal slaughtering; soaps or cleaning supply production; foundries; transportation; and cotton (Wenner, Wright and Lal, n.d., pp. 102-104; Pallen, 1997, pp. 116-18). All of these negative examples contribute to: air, water and noise pollution through waste and toxic chemical discharge; land degradation, biodiversity loss, deforestation and soil erosion; contribution to negative human health effects through pesticides and fertilizer use, exposure to toxic chemicals, occupational safety hazards, poor working conditions, and using outdated technology and equipment (Wenner, Wright and Lal, n.d., pp. 102-106). Additionally there are many activities that may increase social and environmental problems or that are prohibited by laws or agreements (FMO and Triodos Facet, n.d., p. 6).[31]

Savings are the second service area. Savings have not always been a standardized microfinance product since many MFIs do not offer savings services or stress its importance. Yet savings are fundamental to mitigate risk and vulnerabilities caused by natural events through the diversification of income sources and asset building (Hammill, Matthew and McCarter, 2008; Dowla, 2009; Khan, 2010). By encouraging monthly savings, MFIs can assist in managing recipient's consumption patterns, especially in the aftermath of environmental crisis (Hammill, Matthew and McCarter, 2008, p. 117). An example of a successful savings scheme is the

[31] Some examples here include: child labour, trade in products or activities deemed illegal, weapon and munitions production and trade, trade in endangered wildlife, trade in hazardous materials.

Bangladesh Unemployed Rehabilitation Organisation (BURO) MFI that offers savings options that require recipients to make regular saving deposits for a fixed period with the bonus of withdrawing lump sums (up to 75%) without penalty during a natural disaster (ibid). Insurance is another product that can be adapted to assist with environmental concerns (Dowla, 2009, p. 25). Enterprise insurance can protect vulnerable livelihood assets such as livestock from husbandry or crops from agriculture. Housing insurance can protect homes damaged from natural disasters. Personal or household insurance can protect personal assets acquired through increased income (ibid). Providing insurance products allows recipients more options for livelihood protection and affords peace of mind.

Business services open other avenues for MFIs to include environmental responsibility into the practices of recipients (Morris, et al., 2007; Khan, 2010; Pallen, 1997; Starobin, 2008; Archer, 2009). Firstly, environmental education can provide access to information such as weather forecasting and local environmental conditions. Education can also offer guidance on health and safety measures such as exposure to hazardous substances and unsafe working conditions (Pallen, 1997, p. 43). MFIs can link recipients to reduce wastefulness of resources. This can be accomplished by linking enterprises whose outputs (crop residue) can be utilized for other's inputs (biomass or biofuel production). Education can offer mitigation strategies or incentive schemes by suggesting sustainable inputs (natural pesticides). Education therefore provides knowledge of sustainable practices that will enhance the recipient's ability to consider the environment. Secondly, MFIs can link recipients to the carbon market and ecosystem services (Morris, et al., 2007; Khan, 2010). Currently the rate for carbon emissions is 8 USD per tonne on the market. Therefore, payments for ecosystem services and carbon emissions can increase recipient's income that can then be ploughed back into the enterprise and improve quality of life (QOL). MFIs can also encourage the use of renewable energy *(RE)* technology (Pallen, 1997; Parkerson, 2005). Research shows that an effective way of incorporating RE into households is to match current household energy expenditure to RE expenditure so that the household does not notice the impact; the cultural acceptability of the product is oftentimes a challenge since many of these technologies are met with scepticism due to their novelty; the technology must offer incentives such as decreasing the recipients environmental risks and increasing the health and safety benefits in order for the product to be considered. The MFI can offer services for RE technology by offering maintenance, repairs and warranties (Pallen, 1997, p. 36; GMf, 2007, p. 13). Overall, loans, savings, insurance, business services and technology are all service areas where the environment can be considered.

3.1.3 Loan Recipients

Recipients of microfinance can address environmental concerns in a variety of ways that can be initiated at individual, household and enterprise levels (Hammill, Matthew and McCarter, 2008; Morris, et al., 2007; Starobin, 2008; Khan, 2010; Hall, et al., 2008; Araya and Christen, 2003). On the individual and household levels, recipients can demonstrate environmental protection by mitigating their own impact. This can be accomplished by adopting alternative energy solutions such as the installation of solar PV systems and the use of clean energy through using Light-Emitting Diodes (LED) (Araya and Christen, 2003, pp. 22-3). Also recycling and minimizing waste and water consumption can contribute to positive impacts. On the enterprise level, recipients can promote environmentally sensitive enterprises where goods offered and services provided through the enterprise lessen or even reverse negative impacts on the environment (Starobin, 2008). Through enterprises, recipients can also mitigate negative impacts by adopting environmentally friendly solutions similar to the individual or household level with the use of RE and recycling measures (Hammill, Matthew and McCarter, 2008, p. 118).

3.2 Environmental Avenues for Microfinance

As informed by the literature, microfinance has the ability to tap into environmental concerns previously untouched by the industry.[32] Energy is one such area that encompasses renewable energy, clean energy and production, energy efficiency and carbon finance. Biodiversity conservation is another area that includes agriculture, forestry and water. Both of these areas will be unpacked to demonstrate their importance to environmental sustainability in microfinance. Table 3.3 represents an amalgamation of the areas in discussion.

[32] Teutsch, 2009; Lal and Israel, 2006; Chowdhurry, 2008; Mayet, 2000; Araya and Christen, 2004; Rippey, 2009; GMf, 2007; Pallen, 1997; Morris, et al., 2007; Parkerson, 2005; Banks, n.d.; Mihelcic, Ramawami and Zimmerman, 2007; Mohiuddin, 2006; Bueno, 2010; Lindlein, 2008; PlaNet Finance, 2005; Haag, 2008; Erasmus, 2009.

Table 3.3: Sustainable Avenues

Type/ Green Activity	Individuals & Households	Micro-Enterprises	MFIs
Renewable Energy	Solar Water Heating; Solar-Photovoltaic; Biogas	Biomass; Small Hydro; Wind; Solar Water Heating	Biomass; Solar Water Heating; Policy; Loan Products, Incentives
Clean Energy, Production, Energy Efficiency & Carbon Mitigation	Lighting; Domestic Appliances; Eco-efficient Housing (Retrofitting, Insulation); Clean Energy (cooking); Recycling; Reduced emissions (carbon finance)	Industrial Energy Efficiency; Eco-efficient Buildings; Clean energy (biofuels & lighting); Recycling; Sewage plants; Reduced emissions (carbon finance)	Eco-Efficient Buildings; Lighting; Recycling; Reduced emissions (carbon finance & aggregation); Policy
Agriculture, Forestry, Water & Bio Conservation	Sustenance gardening; Planting indigenous	Forestation or avoided deforestation; Low carbon agriculture; Crop choices; Farming practices;	Policy; Education; Incentives Schemes
Environmental Insurance	Housing; Assets	Small Farmers; Climate; Livestock; Assets;	Community-level projects; Financial products (risk management)
Motivation	Personal	Personal; Commercial	Commercial; Mission; Legal, CSR; Advocacy & policy; Monitoring & evaluation

Microfinance can influence sustainable practices for individuals, households, micro-enterprises and MFIs. Source: Adapted from Lindlein, 2008, pp. 5, 18; Rippey, 2009, p. 6; Author

3.2.1 Energy

Approximately a third of the world's population lives without modern energy services and in Africa alone; this calamity affects at least 80 per cent of the population (Mohiuddin, 2006, p. 119). Energy is central to virtually every aspect of people's lives and is crucial to income generation, food security and health but the poor experience energy poverty (Mohiuddin, 2006, p. 119; Morris, et al., 2007, p. 11).

> *Reliable and affordable energy are increasingly recognized as a prerequisite for economic development and environmental protection (...) Thanks to the availability of renewable energy technologies... new energy demands can be accompanied by the reduction of environmental impacts of energy use. By adopting these technologies through innovative microfinance strategies, developing countries can protect the environment even as they grow their economies (Mohiuddin, 2006, p. 119).*

MFIs are uniquely positioned to encourage energy conservation amongst recipients by promoting new technologies (Bueno, 2010). Out of the estimated 150 million people that MFIs serve, only 0.5% receives loans to invest in energy (ibid). Little research has been done on the effects of energy poverty and offering energy loans requires expertise and introduces new risks but there are emerging successful examples (ibid).[33] Access to energy services are therefore

[33] Successful examples include Grameen Shakti (Bangladesh), Faula (Kenya), Barefoot Power, SELCO and SEWA (India), SEEDs (Sri Lanka), Emprenda (Argentina) (Counts, 2011, p. 9, 17, 19, 21).

seen as a way to transform people's lives by addressing energy poverty and improved benefits include: increased income generation by extending operating hours; children, especial girls, can be freed from fuelwood collection duties to attend school; and water can be boiled (Morris, et al., 2007, p. 11). Energy therefore can be the means by which MFIs expand into new service areas.

Renewable energy (RE) is energy that is "not sourced from the ground, generated by sources which are not finite, as contrasted with fossil fuel (natural gas, oil & coal) (and) is consumed without emitting carbon dioxide, the primary cause of global warming" (Teutsch, 2009, p. 6). Energy is estimated to consume a significant 9 to 25 per cent of monthly household expenditure (Bueno, 2010; Rippey, 2007, pp. 11-12). Therefore, investing in RE not only offsets carbon emissions and helps the environment but also makes good economic sense especially to sell electricity back to the grid for rebates. The use of solar, wind and water-powered technology are becoming increasingly popular. There have been many successful examples of MFIs implementing products and programmes that include RE (Morris, et al., 2007; Mohiuddin, 2006).[34] Some of these MFIs offer delivery, installation and maintenance of PV systems, technology trail periods and biogas technology that compliment the large number of livestock loans whilst others have separate energy departments, partner with energy organisations or have energy-focused missions (Morris, et al., 2007, p. 55). There are many challenges with RE as many of the MFIs who venture into the RE market must incur market costs whilst being dependent on government subsidies and grants. Additionally they have to deal with low recipient awareness; constraints such as lack of resources; strict loan eligibility requirements; and lack of collaborating organisations and suppliers. In addition, there is no 'best practice' mechanism in place and for many poor communities; RE technology is not a priority (Morris, et al., 2007, p. 56; Parkerson, 2005, p. 8).

Addressing climate change falls into two categories: namely mitigation, which limits carbon emissions to reduce the severity of climate change and adaptation that focuses on measures to help people adjust to the changing conditions (Rippey, 2007, p. 5). Clean energy promotion supports both of these categories through the use of alternative fuels and lighting and carbon trading. Counts (2011, p. 15) states that ultimately success factors for microfinance programmes rely on developing appropriate financial options, building community awareness and training individuals for technical support and maintenance (income generation).

[34] SEWA Bank in India, SEEDS in Sri Lanka, NUBL in Nepal, AMRET in Cambodia, Fonkoze in Haiti and FAULU in Kenya.

It is estimated that 2.5 billion people globally rely on traditional fuels such as wood, coal and dung to meet their cooking and heating energy needs (Morris, et al., 2007, pp. 11-12). Approximately 85 per cent of this population are rural dwellers with 575 million people located in Africa (Morris, et al., 2007, pp. 11-12; Haag, 2008). The cumulative impact of unsustainable harvesting of fuel and heating materials can cause significant damage to the environment and human health (Morris, et al., 2007, pp. 11-12). Recipients of microfinance and their families spend a significant amount of time collecting resources like wood and dung to fuel fires used for cooking and heating which could otherwise be used for more productive activities (ibid). Close to 1.6 million people die each year who are exposed to indoor air pollution due to toxic smoke (carbon monoxide) caused by cooking over open flames. This has been a major contributor to respiratory diseases such as pneumonia, bronchitis and emphysema with the brunt of the effects falling unduly on women and children (Teutsch, 2008, p. 3; Haag, 2008). Additionally the risk of burns and uncontrolled fires increases dramatically (Teutsch, 2008, p. 3). Improved cook stoves and biomass digesters are possible solutions for mitigating the unsustainable use of fuel sources. Improved cook stoves are designed to control the rate at which fuel burns thus typically leading to a 50 percent decrease of the fuel needed for cooking (Rippey, 2009, p. 9; Teutsch, 2008, p. 4). Solar cookers are also an option but are oftentimes slow to heat and therefore are undesirable. Biomass digesters convert dung and other waste into methane that is then used for cooking (Rippey, 2009, p. 9). Almost any form of organic waste can be turned into a fuel substitute known as biomass briquettes where slurry (solid digested waste) is pressed and dried (ibid, p. 10). Improved cook stoves and other clean energy technology are areas where MFIs can expand their services. Loan products can be designed for biomass briquette production that creates jobs and have low start-up costs as well as for cook stove distribution. Biofuel production can be profitable through waste collection since the costs of growing plants or collecting waste from animals has already been incurred (Rippey, 2009, pp. 10, 12; Teutsch, 2008, p. 4).

Currently 1.7 million people globally are without electricity (Lighting Africa, n.d.; Morris, et al., 2007, pp. 11-12). Throughout Africa especially, a dismal two per cent of rural households are electrified (Morris et al., 2007, p. 16). To meet their lighting needs, two million people use kerosene (paraffin) for household lighting because they lack affordable alternatives (Rippey, 2009, p. 8). Kerosene is hazardous, unpleasant to smell and gives poor light (Rippey, 2009, p. 8; Teutsch, 2008, p. 3). Each day around the world, households consume the equivalent of 1.7 million barrels of petroleum in kerosene (Rippey, 2009, p. 8). Since alternative energy has recently become more affordable, the possibility to compete with kerosene has emerged (ibid). New technology such as compact fluorescent light bulbs (CFLs) and LEDs have provided

affordable, improved and clean alternatives for lighting energy needs. The socio-economic benefits are numerous; improved lighting can extend the operating hours and working day for enterprises that can lead to increases in income and productivity at home can also be improved by increasing study hours thus contributing to increased quality of life (QOL). MFIs can design loan products for entrepreneurs who sell solar lamps or those that use solar powered energy to charge cell phones or batteries for customers and street vendors can use the light to extend business hours (ibid).

Carbon offset financing is a growing sector internationally. Carbon offsets are defined as "financial instruments representing a reduction in greenhouse gas emissions, typically generated from emissions reducing projects, measured in metric tons of carbon dioxide" (Teutsch, 2008, p. 5). They exist to cap the amount of greenhouse gases that companies are allowed to emit and are a way of financially penalizing offenders and rewarding sustainable practices (Rippey, 2009, p. 11). There are two primary markets for offsets: compulsory and voluntary (Teutsch, 2008, p. 5; Rippey, 2009, pp. 11, 15). MFIs have the opportunity to capitalize on this potentially lucrative source of funding through voluntary emissions reduction (VER) as set out in the Kyoto Protocol (Teutsch, 2008, p. 5). The carbon offset by one microfinance recipient switching to clean energy is insignificant but scaling these initiatives to reach all recipients and community members has the potential to be cumulatively momentous (ibid). For example, the amount of carbon emissions saved by switching from a kerosene lantern to a solar lamp would be worth two USD per year (ibid). Thus, it would only be beneficial if many people were reached (Rippey, 2009, p. 11). Another relevant area for MFIs is the clean development mechanism (CDM) that "allows businesses to offset emissions above their caps by investing in projects that will reduce emissions in developing countries" (ibid). Here MFIs carrying out relevant activities can take advantage of the CDM mechanism. With climate change receiving more attention, possible funding opportunities may become available to MFIs that address environmental issues. Carbon funding though is a complex process that requires specialized knowledge that many MFIs are unequipped to deal with (ibid, p. 15).

3.2.2 Biodiversity Conservation

Biodiversity is defined as the variability of living organisms between species, of species and of ecosystems (Araya and Christen, 2004). It is crucial for boosting ecosystem productivity where each species has a significant role to play in the process of preventing and recovering from disasters (ibid, p. 4). Species extinctions not only effect biodiversity but also have profound repercussions on socioeconomic development (ibid). At least 40 percent of the world's economy and 80 percent of livelihoods are dependent on biological resources (ibid). In Africa as well as

around the world, indigenous knowledge about biodiversity is found in virtually every household. In South Africa for instance, traditional knowledge includes intercropping and mulching for bio-diversity farming practices; stone lines for soil and water conservation; gathered wild food products; fermentation techniques for food processing and storage; and medicinal products made from plants and animals (Mayet, 2000, p. 2). Microfinance has the opportunity to tap into local knowledge structures and build tools to reduce the vulnerability of their recipients by protecting biodiversity (Araya and Christen, 2004, p. 4). There are three areas where MFIs can play a role to protect biodiversity; these are water management, forestry and agricultural practices.

On one hand, floods, drought and toxic waste runoff from enterprise and industry can contribute to waterborne diseases that contaminate the water supply and cause crop failure (Khan, 2010). MFIs can tailor specifically designed loans to promote tube-well construction and rainwater harvesting (ibid). Rainwater harvesting is especially important in that it can provide a substantial portion of domestic, commercial and agricultural needs (Mihelcic, Ramaswami and Zimmerman, 2007, p. 3416). On the other hand, the preservation of forests is known to be the most cost effective carbon reducing strategy (Rippey, 2009, p. 10). One-fifth of all greenhouse gas emissions stem from the destruction of forests as clearing land through fires and other means disturbs soils and accelerates decomposition of forest waste, contributing heavily to carbon emissions (ibid). Therefore preserving forests is crucial for addressing environmental concerns. MFIs can promote forest conservation in a number of ways: Reforestation is the re-planting of trees in areas where forests once were; aforestation is the planting of trees previously not forested; and agroforestry combines both agriculture and forestry to create sustainable land-use where trees and shrubs are intermixed with crops and livestock (Teutsch, 2009, pp. 5-7). In Bangladesh, the Haor Resource Management Project determined that swamp aforestation realized numerous long-term benefits of using fuelwood and material availability, decrease in threatened flora and fauna, increase in biodiversity habitats, more fodder for cattle, the conservation of threatened species and less illegal activity (Nishat, n.d., pp. 6-7). Another study also in Bangladesh determined that the Social Forestry Programme enhanced environmental knowledge of its participants that enabled households to make environmentally sound decisions (Chowdurry, 2008, p. 12).[35]

Agriculture is perhaps one of the most important aspects of biodiversity conservation. The International Food and Policy Research Institute (IFPRI) survey conducted in 2007 found that

[35] Social forestry activities include tree nursery establishment, tree planting on farms and other land, management and utilization of wood and non-wood forest products and are aimed at meeting the consumption and income generation needs of the poor (Chowdurry, 2008, p. 15).

67 percent of farmers were adapting to climate change but faced challenges in accessing finance and adaptation knowledge (in Davis, Abed and Hossein, 2011, p. 1). This demonstrates a gap for the microfinance sector, which in certain cases has had a tendency to finance agricultural development through inputs (seeds, pesticides, fertilizer and livestock) all of which impact the environment (Lal and Israel, 2006, p. 361). Some impacts are small but cumulatively they can be destructive. Again research from Bangladesh shows that microfinance increases pesticide use amongst borrowers and encourages practices that degrade land (ibid). The following areas are impacted by agricultural development: soil erosion mainly due to water over sloped land; forest conversion using slash and burn agriculture; pesticides that harm human health and wildlife; burning of other land that depletes nitrogen and other important nutrients in the soil; nutrient mining where nutrients in the soil are not replenished; desertification of degraded dry lands; and livestock grazing impacts such as overgrazing and compacted soil (ibid, pp. 161-63). Pesticides alone are more prevalent than any other hazardous substance and account for over 10,000 deaths every year and millions show symptoms of pesticide poisoning in developing countries (Palan, 1997, p. 46). Even though these figures are grave, there have been successful examples of microfinance and sustainable agriculture. For example in Belize, Sustainable Harvest International works with Mayan farmers to grow cacao by companion planting and agroforestry (Teutsch, 2009, p. 3). MFIs can assist farmers by looking to modernize agricultural production (much in line with the Boserupian perspective), collaborating with organisations that promote sustainable agriculture and realizing that the volatility of weather patterns requires recipients to diversify income sources (Rippey, 2009, pp. 12-14). Sustainable agricultural practices can therefore be placed into two categories: low carbon agriculture and adaptive agriculture.

Low carbon agriculture includes cultivation practices (no-till and contour cultivation), integrated pest management (IPM), cropping patterns (crop rotation, intercropping and shade cropping) and organic farming (Lal and Israel, 2006, pp. 369-70; Rippey, 2009, pp. 361-63). Adaptive agriculture techniques include the adjustment to small changes in weather patterns by choosing more appropriate and resilient crops (Rippey, 2009, pp. 361-63). In addition to sustainable agricultural practices, it is important for MFIs to understand the role of women in agricultural activities. Rural women are involved in harvest, food collection, timber and non-timber forest source collection, building materials, medicinal plants, fuel and fodder collection and possess the knowledge on how to manage these resources effectively (ibid, p. 363).

3.3 Conclusion

The conclusion drawn from the chapter is that there are many successful examples of sustainable microfinance practices occurring around the world. Even though there have been studies that contest the effectiveness of microfinance in reducing poverty, the consensus from the majority of studies suggest that microfinance does improve the lives of the poor. Sustainable microfinance (SMF) is even more challenging in the sense that since the concept is relatively new to microfinance, studies have only demonstrated the positive aspects of SMF. In time as SMF is observed in practice, other studies will reveal the challenges of this approach but this perspective is missing from the literature. One way for microfinance to adopt principles of SMF in practice is through sustainable strategies: the influence of MFI operational practices or through the practices of their loan recipients. Operational characteristics of SMF practices include incorporating sustainable principles into the policies and practices of the organisation and stem from the fact that it makes good business sense to consider the environment, measures of sustainability can be merged with existing practices, through environmental awareness and education, by modelling sustainable behaviour, partnering and networking, people centred development (PCD), and by way of market research. Another strategy for sustainable practices available to MFIs is the expansion into new service areas by adapting or creating new products and services such as loans, savings, insurance, remittances and business development. Loan recipients can address environmental concerns on individual and enterprise levels by mitigating environmental impacts. The second way for microfinance to adopt principles of SMF is through the identification of environmental avenues such as energy (renewable energy, energy efficiency, clean energy and carbon finance) and biodiversity conservation (through agriculture, forestry and water management). There was sufficient evidence for locating examples that support the SMF framework.

These examples provide insight and provide opportunities for microfinance in South Africa to incorporate sustainable principles but it may be problematic to pursue due to the peculiarities of the sector in the country. One opportunity identified is that it makes good business sense to consider sustainability and yet in South Africa, some MFIs find that sustainability seems insignificant when you are dealing with extreme poverty cases. Other opportunities such as incorporating sustainability into the policies and practices of the MFI; promoting environmental education and awareness; modelling sustainable behaviour; and conducting market research are seen as a burden as it takes away from other aspects of the organisation, taxes the already lack of resources and increases costs, which are already high. Additionally partnering and networking were identified as an important opportunities. Again, in South Africa some MFIs realised that this leads to increased tensions since many of the partnering organisations had

differing missions to the MFI and there were fewer partnering organisations to choose from due to the novelty of the field. Finally in dealing with energy poverty, instead of experiencing success, only challenges existed mainly stemming from the novelty of the technology and the lack of education and exposure to the products. Therefore, while successful examples are on the increase internationally, South Africa is experiencing many barriers currently. This is not to say that pursuing sustainability is a futile exercise but that perhaps in time, the sector will develop appropriate strategies for the South African context, which currently do not exist. In the next Chapter (Chapter 4), empirical evidence for SMF in South Africa is revealed.

CHAPTER 4

Findings: Empirical Evidence from the Case Study on Sustainable Microfinance in South Africa

To make the case for sustainable microfinance (SMF), the empirical data must corroborate the theoretical framework. Therefore, the goal was to investigate how the theory of sustainable development (SD) links to microfinance practice. An attempt was made to ground observations made in the field regarding SMF practices. This chapter gives insight for a case in Cape Town and concludes there are many challenges observed and SMF is still to be established in South Africa. The two research questions addressed are as follows: *What is the situation regarding sustainable (SMF) practices in South Africa; and, how does the case study contribute to understanding SMF?*

4.1 The Kuyasa Fund (TKF)

The Kuyasa Fund (TKF) (case study), a housing microfinance institution that began in Cape Town in 1999, believes the poor are credit-worthy and should therefore be provided credit to build sustainable homes and improve communities and uses microfinance as a tool for improving housing situations (The Kuyasa Fund, 2010). TKF has the goal to increase target market penetration of the unbanked population and meet financial sustainability, which it hopes to achieve by tapping into the potential two to six million household customer market (ibid, p. 6). Access to adequate housing is thought to be one of the most important developmental issues in contemporary South Africa and the developing world (Coetzer, 2010; Ross, Bowen and Lincoln, 2010; Tonkin, n.d.). Even though citizens are guaranteed the right to access adequate housing[36] (Coezter, 2010), the government has had a tremendous challenge of meeting the needs of the majority of its population who face abject poverty. Despite government's many successes at delivering over two million houses (RDP houses)[37] over the past 15 years, millions more still lack basic shelter, live in poor conditions and have inadequate access to basic services (Tonkin, n.d., pp. 36, 394; Ross, Bowen and Lincoln, 2010, p. 434).

[36] Found in Section 24 of the Bill of Rights in the Constitution.
[37] Reconstruction and Development Programme (RDP) of the mid 1990s was a socio-economic policy that aimed to mobilise people and resources to meet basic needs of all its citizens (Tonkin, n.d., p. 394).

Housing finance emerged in South Africa as field players recognized the growing opportunities to serve people at the bottom of the pyramid (BOP) (Coezter, 2010).[38] Out of over two million RDP houses delivered by government, only 100 000 are linked to credit which demonstrates that few people have access to finance in order to improve the properties they have obtained (van Vuuren, 2010). TKF recognized this gap in the market to provide services to homeowners excluded from formal finance. Recipients are eligible for loans from R1 000 to R30 000 to use towards improving their housing situation. Until recently, TKF had provided only housing loans but now have expanded their services to include business loans to assist community entrepreneurs and renewable energy (RE) loans (The Kuyasa Fund, 2010). Recipients are encouraged to use funds for RE products (solar water heaters [SWHs], stoves, lamps) and for renovations (tiling, tubing, electrification, plastering, painting, fencing, flooring, and structural extensions) (The Kuyasa Fund, 2010). The standard RDP house valued at R50 000 is often too small (23-36 square meters) to accommodate a family but by accessing TKF's services (savings groups and loans) to increase the original structure to at least 60 square meters, the house is then valued at up to R250 000 which is more than four times its original value (van Vuuren, 2010).

Figure 4.1: Philippi Customer Service Centre (CSC)

The CSCs have solar energy on display as seen with the solar water heater on top of the container. Source: Author

[38] This is termed as 'gap housing finance', which many formal institutions such as banks and informal institutions such as MFIs have tapped into.

TKF provides services to two provinces (Western Cape and Eastern Cape) in both rural and urban areas (The Kuyasa Fund, 2010). Customer Service Centres (CSCs) are located in densely populated areas where recipients and potential recipients can enquire about services (The Kuyasa Fund, 2010). Currently TKF has a head office (Cape Town), six branches (two in Cape Town, Boland, George and two in Port Elizabeth) and 14 CSCs. In the future, TKF is looking to expand to many other parts of the country (The Kuyasa Fund, 2010). TKF plays heavily into the strong culture of group savings found throughout South Africa since accumulating savings is one of the requirements to accessing loans (van Vuuren, 2010). Table 4.1 provides the impact statistics of TKF showing that the organisation targets women and those living below the poverty line.

Table 4.1: TKF Impact Statistics & Recipient Profiles[39]

Women	76%
Informally Employed/Pensioners	66%
Earning < R1 500	42%
Earning < R3 500	93%
Total Loans	23 553
Average Loan Amount	R6 500
Total Recipients	18 325
Portfolio Value	R123 672 713

These statistics demonstrate that TKF's loan recipients are mainly poor women.
Source: http://thekuyasafund.co.za/site/. Accessed 10/04/2011.

TKF recipients are drawn from those that either have an RDP house or are title deed holders (Interview, TKF Operations Manager, 11 March 2011). Additionally, the recipients must be working, self-employed or pensioners (Interview, TKF Management, 24 February 2011). TKF does not work with informal settlements or shacks. This is because the organisation needs to guarantee some form of collateral from their recipients. House ownership serves as collateral with the idea being that it creates a sense of ownership and pride but houses are never taken from the owners even in the event of default on loans (Interview, TKF Manager, 11 March 2011). TKF has a very strict policy on what the loans distributed to recipients can be used for (ibid). TKF is audited by institutions that provide them funding, therefore TKF makes sure their recipients understand the importance of using loans solely for housing needs (ibid). When a potential recipient applies for an initial loan, TKF first sends an inspector to check if there is a need for what the recipient requests, then the loan is approved and after two months, the

[39] Earnings are based on income per month.

inspector returns to verify that the money was used accordingly (ibid). The recipients are expected to pay back a portion of their loan on a monthly basis and measures are in place to collect what is owed. If the recipient does not use the money for housing, that recipient will not be able to obtain another loan.

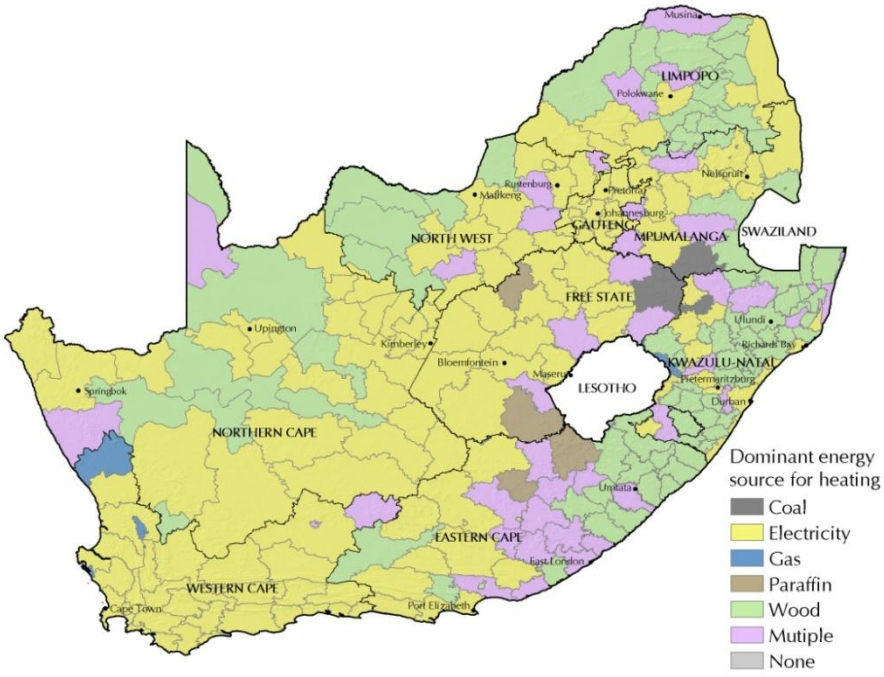
Expanding into the renewable energy (RE) market by providing loans has allowed TKF to respond to the unique South African situation. In South Africa, electricity is generated from coal, which makes it one of the highest green house gas emitting countries in the world (Prasad, 2007, p. 3; Visagie and Prasad, 2006, p. iii). It is estimated that 77 percent of urban households nationwide are electrified (ibid, p. 252). However, many people especially in impoverished and rural areas are not connected to the grid nor can they afford a constant supply of electricity (Banks, n.d., p. 111). It is noted that even currently, 2.5 million people use candles for lighting purposes, 737 000 use paraffin, 25 percent of households use wood for cooking and 11 percent use coal (DEAT, 2006b, p. 252). The study conducted by Aitken (2007) that compared household energy use across the Eastern Cape, North West and Kwa-Zulu Natal provinces showed that paraffin, candles, wood and coal are still prevalent sources for household energy usage.[40] The study found that energy expenditure costs low-income households between six and 18 percent of monthly income (ibid) which is expensive. Traditional fuel source uses demonstrate the blatant energy poverty that exists across many provinces. Government policy has attempted (successfully so in many instances) to improve energy services for the poor (Prasad and Visagie, 2006, p. 1)[41] but many people are still left in the dark (Banks, n.d., p. 111). Figure 4.3 shows energy source usage throughout the country.

Fossil fuels currently supply 90 percent of the country's energy requirements but renewable energy (RE) sources are gaining recognition (DEAT, 2006b, p. 258).[42] Some studies have shown that solar water heaters (SWH) are one potential avenue for renewable energy (RE) technology to contribute to poverty reduction (Prasad, 2005; DOE, 2009; Visagie and Prasad, 2006) especially since over 50 percent of households with electricity do not have a geyser (DOE, 2009, p. 14). SWHs have been identified as the "least expensive means of heating water for domestic use on a life cycle cost basis because solar energy is free" (Austin and Morris, 2005, cited in Prasad, 2007, p. 4). The government has ambitious plans to subsidize the costs of SWHs and

[40] Paraffin is mostly used for lighting, cooking and heating with regions such as the Eastern Cape utilizing this source for 90 percent of energy needs. Candles are most commonly used for lighting with the North West and Kwa-Zulu Natal regions using this source to meet 99 percent of their lighting requirements. Wood is most commonly used in Kwa-Zulu Natal to meet 98 percent of cooking and heating needs.
[41] In the '90s, the National Electrification Fund was established to subsidize costs. Then in 2003, free basic electricity allowance was introduced leading to the Electricity basic service support tariff (EBSST).
[42] Hydropower, Biomass, Solar, Wind and Waste are RE sources in South Africa.

rollout over one million units over five years (DOE, 2009, p. 2).[43] There are many successful examples of organisations and projects nationwide that address energy poverty.[44] Again, MFIs are largely silent on the issue even though RE is a viable entry point. Andrews and Craine (2009, pp. 8, 11) argue that existing microfinance recipients represent a vast, untapped and lucrative market with lighting as the first step on the ladder to modern energy services.

Figure 4.2: Energy Source Usage in South Africa



Electricity usage is widespread but many other traditional energy sources used especially in rural areas of the country where electricity costs and connectivity remain challenges.
Source: DEAT Website: http://soer.deat.gov.za/323 WkfYygN14ug.img. Accessed 12/10/2010.

4.1.1 Partnering Organisations

The Kuyasa Fund (TKF) has partnered with two organisations that have helped them enter into the renewable energy (RE) market and develop new services for recipients. PlaNet Finance is an organisation that operates in 44 countries around the world and is dedicated to poverty alleviation through the development of microfinance.[45] PlaNet Finance has been providing TKF with technical assistance since 2010. The Micro Energy Alliance (MEA), a division of PlaNet

[43] The Kuyasa CDM Project, not to be confused with the Kuyasa Fund (TKF), is a pilot project developed by the NGO SouthSouthNorth (SSN) where over 2 000 SWHs were retrofitted to homes in Khayelitsha, Cape Town with the hopes of improving the social, health and economic well-being of the households through the use of energy efficient technology. This Project is South Africa's first registered Clean Development Mechanism (CDM) project under the Kyoto Protocol and the first Gold Standard Project in the world (http://www.kuyasacdm.co.za/).

[44] NuRa in Kwa-Zulu Natal is one such example where solar PV systems throughout rural areas are maintained and managed by this company (Lemaire, 2007). Also in rural areas, solar photovoltaic (PV) numbers are on the increase. Estimates place 70 000 households, 250 clinics and 2 100 schools amongst those utilizing solar PV energy and these numbers are increasing monthly (ibid).

[45] http://www.carbonprogrammes.co.za/projects-planet-finance.php. Accessed 20/04/2011.

Finance, started as an idea to use microfinance to motivate for the business case of addressing the environment at the same time as pursuing other microfinance objectives (Interview, PlaNet Finance, 07 March 2011). MEA promotes the solar product range called EnerGcare, which includes solar water heaters (SWHs), home insulation, efficient cook stoves, wonderbags, and solar lighting (The Kuyasa Fund, 2010). The products are in response to growing needs of the bottom of the pyramid (BoP) communities that TKF serves for cost effective and health improving alternatives to traditional energy sources. This partnership stemmed from the development of the energy efficiency and renewable energy (EE & RE) micro franchise network in South Africa and provided the foundation to reaching the BoP in the country.[46] This model drew on previous initiatives (The Kuyasa CDM Project). TKF is no longer working with MEA but credits MEA for helping the organisation enter into the RE market (Interview, TKF Marketing Manager, 22 March 2011). EZYLight of Digital Energy Solutions is a recent partner of TKF and their collaboration with TKF is the first attempt at entering into the microfinance market (Interview, EZY Light, 06 April 2011). EZY Light is a specialist alternative and sustainable energy design and manufacturing company based in Cape Town whose products are specifically designed, tested and tailored for the local South African market.[47] They have many products designed for the BoP that cater for people living in rural areas and informal settlements where they offer RE products such as solar home systems (SHSs), SWHs, solar lights and even a unit specifically designed for RDP houses and shacks.[48]

4.2 Findings

This section reveals the empirical findings of the research study by addressing the national context's results and the case study's results that are divided into the groupings: the Kuyasa Fund (management, staff and partnering organisations) and loan recipients.

4.2.1 The National Context

Generally, the data revealed two main themes amongst the sample: sustainable microfinance (SMF) in South Africa and an understanding of renewable energy (RE) technology. The microfinance sector in South Africa is diverse in expertise and focus but it was unanimous that the concept of sustainability is not in existence (MCRIL, 2008). Although this is the current trend, two MFIs are aware of the concept and one consultancy company is promoting SMF and is optimistic about its potential success. One MFI revealed that they had been exposed to the concept by the same consultancy company (Personal Correspondence, MFI Managing Director,

[46] ibid
[47] http://www.ezylight.co.za/. Accessed 20/04/2011.
[48] ibid

02 March 2011), whilst another MFI had initiated environmental projects. One MFI that was aware of the concept stated:

> *A year ago, we had a serious look at trying to set up a local distribution of solar lamps through the savings groups that we assist to form. In time, we may also add environmental education in our work. We are promoting organic farming at present amongst group members. But I am afraid that is about as far as we have got. What has been the primary factor hampering progress in this has been scarcity of funding. Securing funds on (sic) SA for poverty related work is getting more and more difficult (Personal Email Correspondence, MFI Director, 08 October 2010).*

Whilst the consultancy company explained:

> *We started by raising awareness for social and environmental issues and financing together… what we did was go to a lot of microfinance and really looked at that research what are the social and environmental issues and how does that effect your business and that kind of a first step, not really going in to how do you actually, you can look at it from two sides to it, you can look at it as a risk factor. If I have a client that has very unsafe working conditions, it might be a risk for me and the financial institution because if you have somebody who has a machine that cut his hand off, this man won't be able to do his business and won't be able to pay back his loan. So there's that side to it and there's the other where you can provide loans for solar water heaters (SWHs) where you actually enter new markets that your competitors don't do so you can distinguish yourself (...) I think awareness is the first step and exposure. For example if you as an MFI look at how can you mitigate the risks of your clients being exposed to changing weather conditions effecting their harvest and say okay we will have to educate them to diversify their livelihoods and by investing time in that we are decreasing our risk and improving our business. By focusing on risk first, you kind of notice what the issues are and when you know the concrete issues then you can come up with solutions (Interview, Consultancy Company, 22 February 2011).*

From this interview, it became clear that mitigating risk to the MFI and creating a competitive advantage are obvious incentives for microfinance to move towards sustainability. This organisation advocates the holistic approach of sustainability reporting standards in microfinance practices such as the Global Reporting Index (GRI) and indicators found on the MIXMarket. They do so by linking relevant criteria to sustainability indicators to provide a framework that helps MFIs to better achieve their mission (ibid). For this firm, exposure, awareness and education become key components on the path to sustainability. Many of the organisations are aware that that concept of SMF is gaining in recognition internationally. This same firm explains:

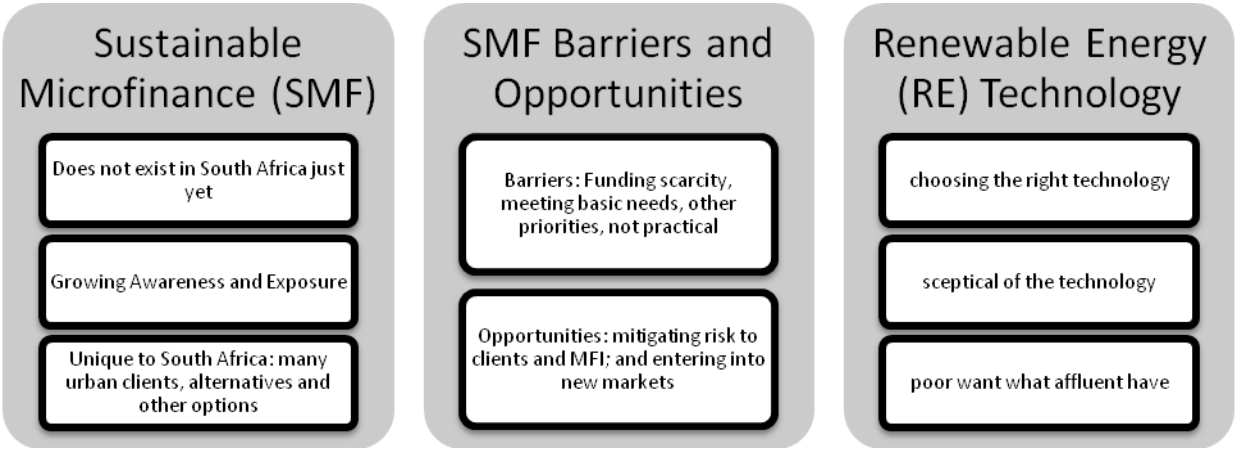
> *I think on an international level, there is more and more about sustainability and social impact. There is more and more awareness about environmental risks and opportunities and microfinance in 5 years time, I think there will be much more than there is now. And I think also with the hike of the electricity prices and the dirty energy South Africa is producing and climate change with the different weather patterns, microfinance will be more effected by these things especially in rural areas and in the agricultural sector. Especially in a business point of view that it's an additional risk for them. I mean if with extreme weather patterns, all their harvest is gone, they can protect themselves. If you follow the research now, you see there is definitely a growing awareness about social and environmental performance and more how environmental issues are effecting their business, there is a growing awareness but that's about where it ends, there hasn't been much research done in that area (ibid).*

Other organisations note that South Africa faces unique circumstances and challenges in microfinance practices. These challenges include scarce funding (Personal Email Correspondence, MFI Director, 08 October 2010), meeting basic needs of clients (Interviews, MFI Managing Director, 03 March 2011 and MFI Consultant 01 March 2011) and the fact that it is a difficult business to be in where survival is the business of the day (Interviews, Consultancy Company, 22 February 2011 and MFI Managing Director 03 March 2011). Some organisations also state that women's businesses are largely situated in manufacturing, textile and service industries and that farmers only make up one percent of client enterprises so these areas have little impact on the environment (Personal Correspondence, MFI Managing Director, 02 March 2011; Interview, MFI Managing Director, 03 March 2011). Therefore considering the environment appears impractical in microfinance practice (Interview, MFI Consultant, 01 March 2011) and one MFI proclaims:

> *(MFIs are) battling so much to fight against poverty and not happy enough with the progress to move out of poverty that to focus on something else is not considered. Environmental issues get put on the back burner for more pressing issues and needs. If a family is struggling to feed itself, there's the need to find the failure in their business and fix that. It seems inappropriate to bring up the environment (Personal Correspondence, MFI Managing Director, 02 March 2011).*

There are many successful examples of SMF internationally adopting renewable energy (RE) products and services serve the bottom of the pyramid (BoP) market. Nevertheless, many challenges emerge in the South African context as supported by experts in RE research. This suggested that promoting solar water heaters (SWHs) are the wrong technology for the BoP and that energy efficient cook stoves are more appropriate (Personal Correspondence, Energy Group, 16 February 2011). This perception stems from the fact that there are alternatives available (electricity) so that the RE technology becomes an accessory and not a necessity (ibid). Additionally this individual supports the notion that solar power for the BoP market relies on two factors: acceptance of new technology and the poor want what the affluent in society have who are just barely considering RE technology (ibid). The data clearly reveals that SMF in South Africa does not yet exist but there is a growing awareness. Barriers include funding scarcity, meeting basic needs as first priority, not practical on the ground and choosing the right technology to promote becomes an important step since many are still sceptical of the technology and want what the affluent of society can afford. Most importantly, two aspects of SMF were identified as being important to microfinance: mitigating risk by ensuring recipients can repay loans and entering into new markets to better serve the recipient base such as with the use of RE technology.

Figure 4.3: Summary of the National Context Results



Sustainability in microfinance faces many challenges and opportunities depend on the context of poverty in the country.

4.2.2 The Kuyasa Fund (TKF)

Two major themes emerged amongst the data: that of sustainable microfinance (SMF) in South Africa and that of the introduction of renewable energy (RE) loans. Again, it was unanimous from the data that the concept of SMF does not exist in South Africa. The data reveals that considering the environment should be a priority for the organisation (Personal Correspondence, TKF Manager, 22 October 2010). This is because considering the environment is important to the recipients who are more susceptible to changing weather conditions (Interview, TKF Manager, 22 March 2011). One interview suggested that considering the environment is not about improving environmental conditions but is about saving money (Interview, PlaNet Finance, 07 March 2011). This is where renewable energy (RE) enters the market but this area is very new to South Africa and in fact promoters of RE technology are years ahead of the market (ibid; Interview, EZY Light, 06 April 2011). In order to promote RE more effectively, the partnering organisations both believe that more needs to be done to explicitly market the positive aspects of RE such as saving money, improving health and education opportunities and this is what the Founder of EZY Light alludes to when he says:

> *They (recipients) are spending their expendable income but its on wastage, throwing it away which increases carbon emissions…Its polluting the air, now we say you are polluting the air in your homes that brings on illness so your kids are inhaling bronchitis, asthma. So talking about kids health brings it to reality. Wouldn't you rather have your kid healthier and studying at night? So this is what's in it for them. In SA about three years ago there were a lot of solar products that came in and did not work so people became sceptical about solar power so we have to rework it and re-educate to build confidence (ibid).*

Solar lights, solar water heaters (SWHs) and energy efficient cook stoves are the most common RE technology. Lights are the most purchased and affordable product whereas SWHs have been

the most challenging because it is hard to test them in the market to gain recipient trust and because short term cost is too high for the bottom of the pyramid (BoP) market (Interview, PlaNet Finance, 07 March 2011). Frequently recipients who purchase solar lights in urban areas of Cape Town send them to rural areas in the Eastern Cape where for many, there is no electricity; for certain areas especially rural areas, renewable energy (RE) makes sense (ibid). One staff member of TKF highlights this aspect but also suggests that urban communities value electricity as an improvement to their quality of life (QOL) when she says:

> *(…) we didn't see that it would work here in Cape Town. I think it works in Eastern Cape whereby there's no electricity. People they (sic) used to using electricity even if the electricity is expensive but they see it as an easier thing for them so now it is not easy to go back to use those stoves without electricity. So they've been doing that for a long time when they were living in the Eastern Cape now they living in good communities whereby there is electricity so they prefer electricity from the solar things (Interview, TKF LCO, 23 February 2011).*

Interestingly, since the creation of the RE loan product in November of 2010, not a single RE loan has been issued (ibid; Interviews, TKF Manager, 11 March 2011 and EZY Light 06 April 2011). Recipients who were already on their third loan with TKF or who had already completed their houses were targeted (Personal Correspondence, TKF Manager, 22 October 2010) and demonstrations took place at the customer service centres (CSCs) to market the products (Interviews, TKF Management, 11 March 2011 and 22 March 2011). Yet TKF did not want to be linked to the products because the Kuyasa CDM initiative shared the same name and TKF wanted to remain focused on providing housing loans rather than focusing on RE; this is where the partnerships became vital. The founder of EZY Light describes some of the many challenges of the technology when he states:

> *We teamed up with Kuyasa (TKF) trying to work out a model in which we can get people to take-up (…) but are you prepared to pay R8 000 for something like that because that's what it would cost. But people would rather wait like they have been for the last ten years for electricity. We are looking at a unit for R1 500. Looking at a calculation, we ask how many candles do you use per night (three candles at R2.50 per candle) so if you look at that, that's R7.50 you are using every night for 30 days times 365 days a year, you are looking at over R2 000 just on candles. So when it comes to the economics of the whole thing, spend R1 500 now on a payment basis and you have light forever, you are saving money in the end anyway. Your return on investment is less than a year. But to get people's mindset around that is a challenge. People would rather spend the R7.50 now, that's R216 or something a month. This is besides the paraffin they use (…) money they spend now is money wasted on a system they could have from anywhere between five and ten years. We have developed it in such a way that even if there is a rainy or cloudy day, you still have three days of back-up in the battery so you still have light, then you need sun for six to seven hours and its recharged again. Even in winter it's not a problem. We were asked to develop a shack unit since there will always be shacks in the next ten years. So we developed the three light unit which has been designed to operate to provide the light people need with the conditions we live under (Interview, 06 April 2011).*

As can be seen, EZY Light is working with TKF to develop a system that will meet the needs of the bottom of the pyramid (BoP) market in South Africa but lack of education about the technology becomes a key barrier to acceptance. Many other constraints and challenges stemming from RE emerged from the data: clients as well as members of TKF are sceptical of the technology largely stemming from a lack of education and awareness (Interviews, TKF Management 11 March 2011 and 22 March 2011; TKF LCO, 23 February 2011, PlaNet Finance, 07 March 2011). The loan development officers (LDOs) are already overburdened - especially when adding RE to their workload (Personal Correspondence, TKF Manager, 22 October 2010). Meeting donor's requirements as well as a general lack of funding and resources to pursue new service areas (ibid); recipients are resistant to change (ibid); the technology is expensive and TKF offers an initial loan amount that is not enough to cover the expense of the technology (Interviews, Planet Finance, 07 March 2011; TKF Management, 22 March 2011 and 24 February 2011). Taking a loan for RE is not a priority (Interviews, PlaNet Finance, 07 March 2011 and TKF LCO, 23 February 2011). Recipients have other pertinent needs and TKF is not aware of those needs (Interviews, TKF Management, 11 March 2011 and 22 March 2011); and government is providing free SWHs (Interviews, EZY Light, 06 April 2011 and TKF Manager 11 March 2011). Some interview respondents believe that this provision of free SWHs from the government is a major problem for the SWH market (Interview, PlaNet Finance 07 March 2011 and TKF Manger, 22 March 2011) whilst others hold an alternative view where exposure to the products is seen to build confidence in the products (Interviews, PlaNet Finance 07 March 2011 and TKF Management, 24 February 2011). One manager from TKF states:

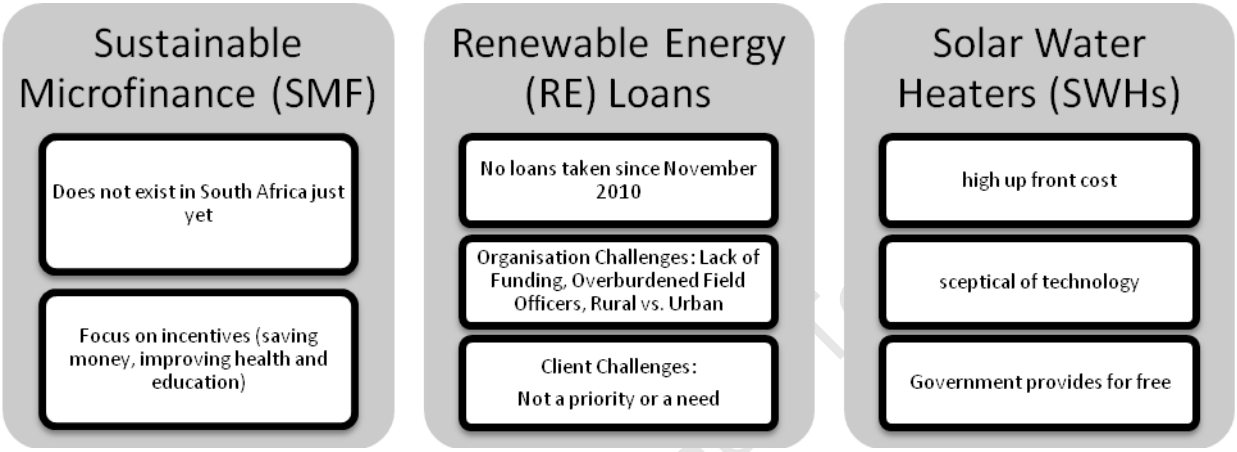
> *I think because the government is introducing this thing is going to help us because more now more people will have it and other people they will see why should I let my neighbour have it and I don't have it. So in the beginning I thought it was going to detract to us but now as I said it's an advantage we are going to take because with the government maybe half the area will get it for free and the other half not (ibid).*

TKF and partners are developing ways to circumvent challenges to the acceptance of RE technology and a very promising model specifically for South Africa is emerging. The founder of EZY Light reveals this when he says:

> *We keep getting asked if we take lay-buys, can we pay it off. So the interest is there so we just need to get a model together, I'm sure we can offer a lot more people the opportunity to buy these units. Most of the people that stay in the urban areas all have homes in the Eastern Cape. So the Eastern Cape is where they need it. We are thinking of doing a lay-buy system where people pay it off over time and then they can have it or if they feel that the risk is lower, it depends on the risk Kuyasa is prepared to take, then they can do it on a microfinance level. Especially in Cape Town, people are used to lay-buys, it becomes a viable alternative because they don't pay a lot more since there's no real finance cost (Interview, 06 April 2011).*

Overall, the data from this sample confirms that SMF does not yet exist but that economic, health and education incentives will be the driving force behind the move towards SMF. Currently no clients are utilising the RE loan product that TKF offers; due to many challenges with the technology such as scepticism, overburdened workers, lack of funding, cost, other priorities, meeting basic needs and government handouts. The immediate costs seem to outweigh the long-term benefits of SWHs.

Figure 4.4: Summary of the Kuyasa Fund (TKF) Results



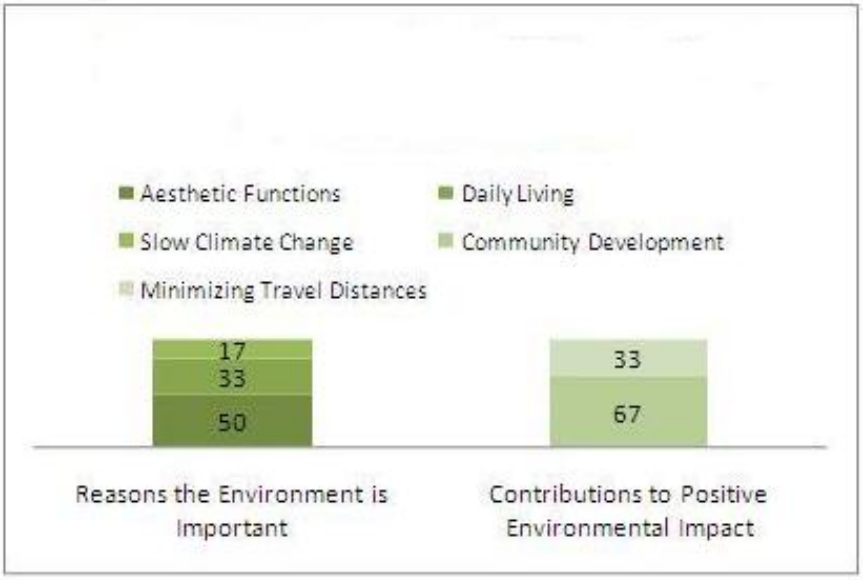
Sustainability is a challenge for housing microfinance.

4.2.3 Loan Recipients

Generally, the questions investigated loan recipient's perceptions of the environment and renewable energy (RE) loans and technology. Sixty-two percent of the loan recipients responded when asked about their perceptions of the environment. Of these, 75 percent cited reasons why the environment is important. These reasons include aesthetic functions (50 percent), importance for daily living (33 percent) and to slow climate change (17 percent). The remaining 25 percent discussed ways to contribute positively to the environment. These ways include focusing on community development (67 percent) and ways to minimize travel distances (33 percent) (See Figure 4.5). Due to misunderstanding the responses and possible translation and language barriers, it seems apparent that loan recipients had a poor understanding of the environment and their impact on it. The following quote from an interview represents one such understanding of the environment:

> *The point of the environment with the trees and so on...it's nice but to our situation we don't prefer the trees because the plots are too small whereby the stem or seeds spread, they make the cracks to the wall (Interview with Recipient 3: 11 February 2011).*

Figure 4.5: Loan Recipient's Perceptions of the Environment[49]



Loan Recipients seem unaware of environmental challenges.

Eighty-five percent of loan recipients responded to questions about perceptions of RE loans and technology (see Figure 4.6). All of these loan recipients (100 percent) showed interest in varying degrees about RE technology. Saving money was one of the biggest incentives (36 percent) while others were willing to wait for government to provide free SWHs (36 percent). Priorities also emerged as an important factor for interest in RE technology (63 percent); some would consider taking a loan for RE only after everything else had been completed on their home (18 percent) whilst others felt that they did not need or want the RE technology or loans (18 percent). For many, it came down to preference; the electric geyser was more appealing (27 percent). One loan recipient explains:

> *What I know is the solar system because you apply for solar system, you don't use electricity, only the sun that make the water to be hot so we did apply for that to the government, just for free (sic)…so I don't feel right now we can take a loan because I want my mother first to finish this account then maybe if there is the money she can apply for other loan but right now, not yet (Interview with Recipient 9: 15 February 2011).*

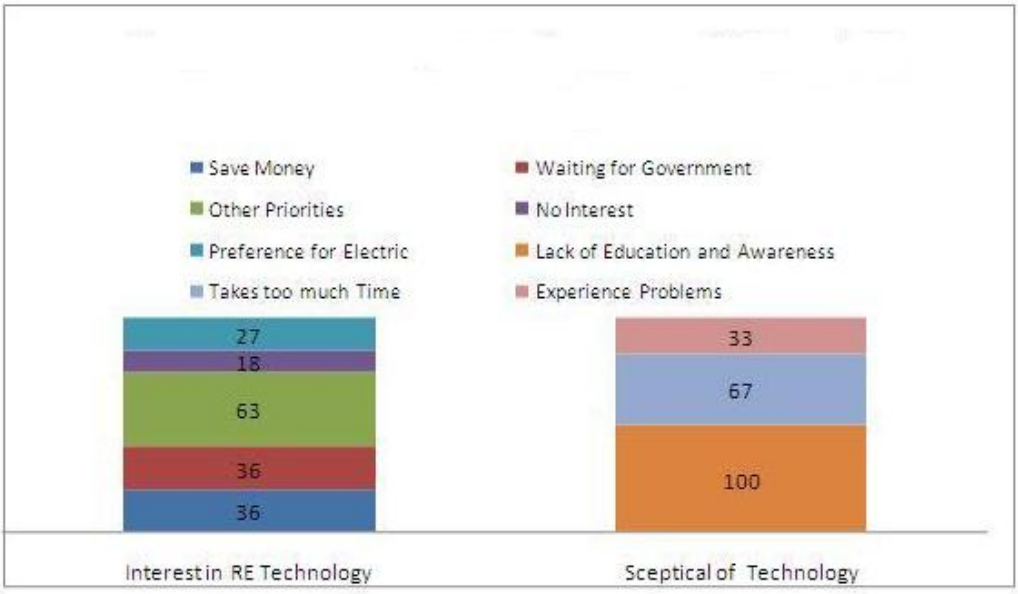
On the other hand, 27 percent of loan recipients were sceptical of RE technology. Lack of education and awareness about RE technology was most prominent (100 percent) with loan recipients feeling that the technology would not work in rain, winter or without sun and some even believed the technology caused fires. Many thought that the technology takes too much time to use when cooking (67 percent). Other loan recipients thought that the solar water

[49] Numerical values expressed in the figure represent percentages. Aesthetic functions refer to trees being pleasing to look at.

heaters (SWHs) did not last long and experienced problems such as leaks (33 percent). These concerns were frequently affirmed by problems experienced by those in the communities that do have the technology. Overall, loan recipients were not willing to take loans for RE products because it was not a priority or a need and the cost was generally too high but the interest was there as long as it was provided free from government. This loan recipient demonstrates her scepticism of the technology when she claims:

> *No. I want the different geyser, the electrical one. Yes it saves money but when I buy something I want it to take time (to last). Those houses in Kuyasa (CDM Project) that got geysers, they have problem, they are leaking and as a main point here in Cape Town, there's a lot of rain, which means there's no sun so for the rest of the year there's no electricity. So you save money for a short period of time from November to April. It seems to us that its useless so we are prepared to buy an electricity one (Interview with Recipient 3: Friday, 11 February 2011).*

Figure 4.6: Loan Recipient's Perceptions of RE Loans & Technology[50]



Loan Recipients have valid concerns about RE Technology.

4.3 Relating the Findings to the Conceptual Framework

This section elaborates upon the empirical findings and discusses the linkages to the sustainable microfinance (SMF) framework presented in Chapter 2. To reiterate, this framework suggests that there are four principles that argue for the consideration of the environment to promote SMF. Since this framework was constructed with development MFIs in mind, its application to a

[50] Numerical values expressed in the figure represent percentages.

housing MFI generates some discrepancies but is supported by the national organisations in the analysis.

4.3.1 Principle 1: Relevance to the Poor

One of the key criteria mentioned for this principle is that the poor tend to be most effected by changing weather patterns and natural disasters since they occupy marginal land. It is noted then that rural communities withstand the worst of environmental challenges that particularly effect livelihoods and the agricultural sector (Interviews, Consultancy Company, 22 February 2011 and TKF Manager 22 March 2011). One manager from TKF proclaims:

> *I think it's particularly important because most of our clients live in areas that would be effected first and foremost by weather differences and climate change and are a lot more susceptible to weather patterns (ibid).*

Another of the key criteria is that of the poverty and environmental nexus where resource degradation leads to increased poverty and poverty leads to increased resource degradation captured in a vicious cycle. Interestingly this aspect was not explicitly addressed by any of the respondents interviewed as the environment was seen as important but not immediately important to microfinance. This could be interpreted as one of the factors as to why the concept of sustainable microfinance (SMF) has not yet been adopted in the country.

The third criterion is that of meeting basic needs of recipients to improve quality of life (QOL). The interviews reveal that meeting the basic needs of recipients are a challenge for MFIs and that consideration of the environment gets pushed aside for meeting more pressing needs (Interviews, MFI Managing Director, 03 March 2011, MFI Consultant, 01 March 2011, TKF Management, 11 March 2011 and 22 March 2011; Personal Correspondence, MFI Managing Director, 02 March 2011). What it seems MFIs do not consider is that the environment is integral in improving the quality of life (QOL) of their clients. For instance, choosing renewable energy (RE) technology to meet lighting, cooking and heating needs can drastically reduce monthly expenditure on other energy sources (Interview, EZY Light, 06 April 2011). Yet because RE is initially more costly than other energy sources, recipients seem unable to acknowledge the potential savings and RE becomes an accessory rather than a necessity (Personal Correspondence, Energy Group, 16 February 2011; Interview, PlaNet Finance, 07 March 2011). The interview with PlaNet Finance reveals:

> *Lots of people are even saying we have little solar lights that are quite expensive for R300 or they can just go to a little trader and get a very similar looking lamp with a small battery which lasts only about three months but only costs R25 and they'd rather buy that ten times.*

Also no matter how many times you tell people the tariffs are going up 25% over the next three years, it doesn't mean anything right now (Interview, 07 March 2011).

Loan recipients also do not want technology that is not tested and not popular. In other words, township dwellers are not prepared to be the 'guinea pigs' for renewable energy (RE) technology not even used by more affluent members of society. Not only do recipients of microfinance face environmental challenges on a daily basis but also the technology that can save money is not desirable for a number of reasons.

4.3.2 Principle 2: Relevance to Women

There are three criteria mentioned under Principle 2. Firstly, women endure the worst of environmental challenges due to gender specific roles. Secondly, understanding these roles is important for microfinance since the majority of loan recipients are women. Lastly, ignoring these factors leads to increased time and energy spent for women as well as increased negative health and education effects for them and their families. The data did not support this principle. This may be because the research did not explore MFIs in depth to the extent of determining women's roles and the Kuyasa Fund (TKF), which focuses on housing, does not provide information on women's roles and livelihoods stemming from their recipient base. The assumption is that if other MFIs were to be explored, data supporting this principle would be abundant. What is apparent though is that the successful marketing of renewable energy (RE) products will largely depend on the acceptance of the technology by women. The positive aspects of the products can lead to improved quality of life (QOL) in many areas such as improved health effects and time for education (Interviews, EZY Light, 06 April 2011 and PlaNet Finance, 07 March 2011). Since women's duties tend to surround that of the family and household, the positive aspects can improve the wellbeing of their families. Therefore, MFIs can promote the positive aspects of RE products as incentive to use the technology (FMO and Triodos Facet, n.d., p. 12). The interview with PlaNet Finance reveals that improving the environment will not be the selling point for these products but rather the positive effects that enhance lives:

I mean of course projects that are trying to raise awareness as well by telling them that by buying this or doing this you're also helping the environment but that information is usually lost. I think it needs to be used more directly; use solar instead of paraffin because your children will be healthier and you'll be saving money (07 March 2011).

4.3.3 Principle 3: Relevance to Livelihoods and Business

The first main point of this principle is that ignoring environmental issues leads to increased costs since every activity draws from the environment in some way. Evidence from the national context research alludes to the fact that activities are largely affected by the environment so

much so that these activities become a risk to the recipient and the MFI (Interview, Consultancy Company, 22 February 2011). The second point of this principle is that microfinance supports millions of risky enterprise activities that contribute to local environmental challenges. Again, data from the national context speaks to this issue. Interviews with two MFIs suggest that 80 percent of women's enterprises are in manufacturing and services where harmful industries are minimal since they do not work with harmful chemicals or significantly impact the environment (Interview, MFI Director, 03 March 2011; Personal Correspondence, MFI Director, 02 March 2011). This demonstrates a lack of recognition, awareness and understanding on both institutional and individual actor levels as to the environmental impact of microfinance activities that cause more risk to both recipients and the MFI (Goldsworthy, 2008, p. 16). The last point found in this principle is that considering the environment makes good business sense. This has relevance to the Kuyasa Fund (TKF) itself in that entering into the renewable energy (RE) market provides incentives to expand to new areas and to better serve recipients (Interview, Consultancy Company, 22 February 2011). One of the major constraints here is the increased burden of time constraints that are placed field workers (loan development officers) that concerned TKF management (Interviews, TKF Management, 11 March 2011 and 22 March 2011).

4.3.4 Principle 4: Relevance to Vulnerability and Future Sustainability

This principle upholds three main criteria. The first is that microfinance can help the recipients they serve to become less vulnerable to environmental threats by improving their adaptive capacity and the second is that increasing recipient's assets leads to a reduction in vulnerability. The only aspect that emerged to address these two criteria was that of housing. Improving home structures and conditions can contribute to vulnerability reduction theoretically. Although there was no evidence from the case study to show that improved homes contributed in this way, studies elsewhere have supported this notion. The one point that emerged in support of these criteria is that the Kuyasa Fund (TKF) and its current renewable energy (RE) partner are in the process of creating a model that will work for the bottom of the pyramid (BoP) base (Interview, EZY Light, 06 April 2011). This will lessen the cost of energy for poor households in order to make available financial capital to be used for other urgent needs leading to a reduction in vulnerability. The last criterion is that considering the environment now will meet the needs of the future. There is no empirical evidence in support of this criterion either. What is evident is that loan recipients do not consider the environment in their daily lives and the MFIs do not yet recognize the impact that microfinance activities have on the local natural resource base.

Table 4.2: Summary of the Sustainable Microfinance (SMF) Framework Results

Principles	Criteria	Evidence	Results
1: Relevance to the Poor	Poor effected most by environmental changes	Yes (Both case study and national context)	Growing awareness
	Environment and Poverty Nexus	None	Not immediately important to microfinance which is reason concept is not yet adopted
	Meeting basic needs	Yes (Both case study and national context)	Due to challenges faced, MFIs do not consider the environment as integral to meeting needs
2: Relevance to Women	Gender specific roles	None	Lack of evidence suggests that further investigation into development MFIs would produce better results as opposed to looking at housing solely
	Majority female recipient base	None	N/A
	Ignoring leads to increased time, energy, negative health and education	Yes (Both case study and national context)	Promoting the incentives of RE to women in charge of households may improve response
3: Relevance to Livelihoods & Business	Ignoring the environment leads to increased costs	Yes (National context only)	Found in the case of the agricultural sector
	Supporting risky enterprises	Yes (National context only)	Perceptions that women's industries cause no harm to the environment suggests a general lack of understanding
	Makes good business sense	Yes (case study only)	RE helps to move into new markets and better serve the BOP but lack of resources is a constraint to this
4: Relevance to Vulnerability & Future Sustainability	Increasing adaptive capacity leads to a reduction in vulnerability	Yes (case study only)	Improving homes can contribute to vulnerability reduction
	Asset building leads to decreased vulnerability	Yes (case study only)	Currently TKF & partners are in the process of developing a model for RE to lessen recipient vulnerability by saving money and improving health and education
	Future sustainability	None	Loan recipients & MFIs do not recognize their impact on the environment

Out of the 12 criteria combined from the four principles, the majority (two-thirds) provided evidence whilst the rest (one-third) did not (Table 4.2). The evidence that was provided fits loosely into the framework. Principle 3 was the only principle where all of the criteria were met which may suggest that the housing MFI case was not a 'good' example for the framework. This is because the organisation's focus is primarily on improving housing situations rather than on

sustainable livelihood and enterprise development in line with mainstream microfinance occurring internationally from which this framework was informed. The national context organisations did not provide evidence for many of the principles either. This is because these organisations were not pursued in-depth due to research constraints and lack of available information. Even though the empirical findings do not fully support the framework, the data still informs important findings about sustainable microfinance (SMF) in South Africa.

4.4 Conclusion

This chapter has attempted to link theory to microfinance practice by applying the principles of sustainable microfinance (SMF) to the evidence from the case study, which provided insight into SMF practices in South Africa. It can be concluded that SMF is not occurring in South Africa for a variety of reasons. It was noted that expanding into renewable energy (RE) markets by providing loans allowed the Kuyasa Fund (TKF) to respond to the unique South African context where energy poverty prevails and because loan recipients were seen to be more susceptible to changing environmental conditions. For renewable energy (RE) though, more research is needed to further understand what technology poor communities need and for more exposure to the technology to build confidence. Currently certain technologies are promoted that are not suited for the conditions and lifestyles of township dwellers. To address this perhaps more engagement with and collaboration from the communities themselves might help to solve this issue. The case study sample revealed that incentives will drive both recipients and MFIs to use RE and yet currently no loans for RE have been considered – which is challenging in its own right. Aspects such as health and education benefits as well as money saving will not be regarded as incentives unless specific attention is given to meeting basic needs and daily challenges that many poor communities face. Until this is resolved, the value of seemingly costly alternative technology will remain hidden. To highlight the challenges further, loan recipients generally had a poor understanding of their environmental impact and it was clear that the environment was not a priority in their daily lives due to the many challenges they face. This largely stems from a lack of education on sustainable environmental practices and the language barrier. Even though the loan recipients showed interest in RE technology, the barriers prevented them from considering the technology. It can be concluded that township dwellers have valid concerns about the technology most of which can be cleared up through education and exposure but for now, meeting the needs in their daily lives takes precedence over testing new technology that is not mainstream. It seems almost ridiculous to put so much effort into changing the mindset of poor township dwellers when their impact in terms of energy, waste and consumption is very small compared to other more affluent segments of society and

industry.[51] It is undisputed that many benefits are attached to the technology (saving money, improved health and environment) and many poor communities are in locations that are exposed to environmental changes but what needs to be done is to place the burden of climate change and environmental degradation on the shoulders of those in society who are consuming resources at an unsustainable rate and those industries that are blatantly pillaging natural resources and polluting for profits.

The national context revealed that there are many barriers to considering the environment in microfinance practices. Collective experiences from these organisations suggest that on the premises of three factors: scarcity of funding, meeting basic needs as a priority and determining its impracticality in the field; considering the environment is not something that microfinance can currently cope with. On the other hand, opportunities were revealed where mitigating risk (to recipients and MFIs) as well as entering new markets might be strong incentives to move towards SMF. This suggests that despite the many challenges, looking at local conditions might enable new solutions to be created. The case study as analysed using the sustainable microfinance (SMF) framework contributed to understanding SMF practices in South Africa. Due to the loose evidence in support of the framework, more research is needed; the housing MFI was not a good fit for the framework and the national organisations were not investigated with enough depth. Important findings were still uncovered even though the empirical results did not fully support the framework. The final chapter will bring together all of the arguments found in the dissertation and suggest ways to better promote SMF practices in South Africa.

[51] Society and industry especially in South Africa are highly dependent on coal, which is considered a 'dirty' energy and consumption rates are much higher than in poor populations.

CHAPTER 5

Conclusions: Insights drawn from the study for sustainable microfinance practices in South Africa

It is uncontested that the environment is an important global concern. It is also evident that microfinance, which aims to improve the quality of life (QOL) of the poorest members of society by offering loans to develop livelihoods and build assets, has principally ignored the relationship of the environment in practices. Sustainable microfinance (SMF) practices are beginning to emerge in South Africa but are not yet recognised by the industry at large. South Africa has the opportunity to learn from the experiences of SMF practices from other countries in order to adopt a truly South African solution for an increasing problem. Growing international awareness of sustainable development (SD) practices; South Africa's own energy and environmental challenges; the national disarray of the microfinance sector; and increasing inequalities from the legacy of apartheid provide grounds for which to consider microfinance as a development approach more holistically. No longer can microfinance in South Africa ignore deteriorating environmental conditions for it is done so at the peril of the local environment, the loan recipients' livelihoods and the sustainability of the industry. Ultimately, if sustainability is sacrificed, environmental conditions will continue to worsen, threatening the ability of future generations to meet fundamental needs; and microfinance as a development tool faces the risk of becoming another development failure. This chapter reflects on the study's performance of the questions it set to explore against the SMF framework.

5.1 Limitations of the study

Four limitations were observed for the study. Firstly, time and financial constraints prevented the author from visiting MFIs nationally, which compromised the depth of understanding of the national context. Secondly, the concept is new internationally and acquiring ample information by way of scholarly materials was not easy; and there has not yet been enough research conducted on the topic to warrant its legitimacy. Thirdly, finding relevant MFIs and organisations in South Africa was a challenging task; this was because the concept of sustainable microfinance (SMF) is a new and unknown field. Finally, due to the limited choice of case studies, the case study was a 'loose fit' for the framework where not all aspects of SMF were integrated.

5.2 Findings of the study

Overall, this study has explored sustainable microfinance (SMF) practices found in South Africa. Five questions were posed that guided the investigation of this problem, four of which were addressed in chapters (two through four). The last question is addressed in this chapter that will determine what insights can be drawn from the case study for adopting SMF principles in South Africa and elsewhere. Even though the concept of sustainability was not found in microfinance practices currently, awareness, exposure and education were all cited as important steps to overcoming the barriers that the industry faces in adopting SMF practices. Two traditional MFIs, one housing MFI and one consultancy firm offer insight into emerging SMF practices. The conclusion here was that incentives for improving health, increasing education and saving capital facilitate acceptance of renewable energy (RE) technology since these aspects contribute to improvements in quality of life (QOL) of loan recipients. Another conclusion was that there are three main areas that provide viable entry points for SMF that include: agriculture where sustainable practices such as organic farming can be encouraged; RE, which in addition to the incentives mentioned provides an opportunity to address energy poverty; and environmental education which promotes awareness and exposure to environmental concerns. The objectives of the study were successfully carried out: a national inventory was compiled and a framework for sustainable microfinance (SMF) was developed from the literature; cases were identified from SMF practices from international examples; SMF was explored in South Africa; The evidence of the case study was evaluated against the SMF framework; and insights are drawn from the case study and international examples for SMF practices in South Africa.

5.3 Implications for further study

From this study, it is evident that further research is needed to understand sustainable microfinance (SMF) practices as a development approach. Across the world, SMF is gaining in recognition and yet it is too soon to determine the legitimacy of the approach. In South Africa, it is suggested that taking into consideration the local and national contexts is vital in constructing an SMF sector that would benefit poor South Africans. On the local level, consulting and educating communities is important for determining effective alternative technology.

5.4 Insights from the study

Certain insights are drawn from the case study for sustainable microfinance (SMF) practices in South Africa. It was discovered that SMF in South Africa is in its infancy but that a few examples

are beginning to emerge, which is promising and yet it remains problematic due to certain confounding factors. An attempt is made to link aspects of the conceptual framework, the examples found across the world and findings from the case study to draw conclusions for SMF in the country.

Based on the evidence found in this study, it is not impossible for SMF to thrive and two main constraints are listed to show ways to overcome the challenges. One of the major points of contention found in the study was meeting the basic needs of poor people (found in criterion 3 from Principle 1: Relevance to the Poor). The literature suggested that the poor are driven to use natural resources (NR) unsustainably due to immediate consumption and income generation needs (Goldsworthy, 2008; Lal and Israel, 2006). Although this was not supported by the case study, other issues regarding basic needs arose. It was discovered that the wrong technology is being promoted. For instance solar water heaters (SWHs) are new to the market, difficult to test and too costly for the bottom of the pyramid (BoP). Additionally, there are alternatives to solar energy such as electricity or other traditional fuel sources, which many people prefer. In Cape Town, township dwellers have valid concerns about the technology for these reasons, which create a major barrier to accepting the technology. Therefore, facing the daily challenges of meeting basic needs of food and shelter takes precedence over taking risks by testing new technology. We can conclude on the evidence that three basic elements must be in place in order for microfinance to conquer these barriers. First, educating people on the benefits of the technology is necessary. Without this, many people will continue to be sceptical and continue to use familiar technology. Second, engaging with communities themselves would help determine what challenges people face and what people want and need since currently the available technology does not suit the conditions of township life. Lastly, bringing costs down is important. As the market for the technology grows and more competition emerges, costs will drop but in the meantime perhaps subsidies from government or MFIs themselves could help with this issue. Without these considerations, poor people are unable to afford the technology that is supposed to save them money outweighing the benefits to their health which creates a 'lose-lose' situation for loan recipients and MFIs.

The other major constraint to SMF in South Africa is that of women. Women make up the majority of the microfinance recipient base (Lal and Israel, 2006) and the case study is no different.[52] Based on the evidence, little consideration is given to women's roles as recipients, thus it seems that ignoring this aspect leads to negative health and education repercussions (criterion 3 from Principle 2: Relevance to Women). Instead, by understanding women's

[52] 76 % of loan recipients at TKF are women (http://www.thekuyasafund.co.za/site/).

responsibilities, microfinance can promote the lifestyles and technologies to women. Since women's duties tend to revolve around the household and family, the benefits of these products and services can increase the wellbeing of their families and by extension communities. Therefore, the success of these aspects relies on women's acceptance. It can be concluded on the premises of health, education and savings that renewable energy (RE) can improve the lives of women's families. For example, if TKF demonstrated to women that installing solar lighting in their homes would reduce exposure to paraffin that causes respiratory illnesses, provides light so that children can study into the night and free up capital that would otherwise be spent on purchasing candles (or other forms of energy), the well being of women, their children and their families can be improved. The case study has not been successful at achieving this but it is suggested based on literature and interviews that demonstrating the benefits of RE to women would be the best way to market the technology.

This study has shown that much of the responsibility in dealing with climate change and environmental degradation falls onto the poor and because of this microfinance has been identified as one avenue to address sustainable development (SD). This is a tricky position to be in because microfinance objectives are two sides of the same coin; on one side is a social mission that drives the organisation to improve the lives of poor people but on the other side, there is the economic objective where making profits is also important. In a sense, the industry relies on the indebtedness of the poor in order to prosper where loans increase debt and possibly vulnerability of the very people who are supposed to be helped through microfinance services, which may perpetuate the poverty cycle. At the same time, perhaps it is better to equip the poor with tools to face their harsh realities and take the risks associated with debt in order improve their lives. This is the challenge of microfinance. What this study found is that it is a lot more challenging for SMF in practice rather than in theory. The theory and literature provided numerous successful examples but in practice in South Africa, it seems almost unfeasible due to all of the constraints and barriers. As is the case with many development initiatives, so much relies on funding and support, which are currently lacking in South Africa but this is the development conundrum: no funding, no development. Unfortunately, until more attention is given to SMF on a national level with support from various networks and government, many of the benefits associated with SMF will remain hidden. More research is needed about the effectiveness of microfinance as a poverty reduction strategy but as long as microfinance is operating, considering the environment in practices is important in understanding the the contexts of recipient's lives. For these reasons, SMF is an important development approach to consider.

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Fieldwork:

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Personal Email Correspondence, Provincial Conservation Unit, Manager: 23 May 2010.

Personal Email Correspondence, MFI, Director: 08 October 2010.

Personal Correspondence, The Kuyasa Fund, Manager: 22 October 2010.

Personal Correspondence, Energy Group, Leader: 16 February 2011.

Personal Correspondence, MFI, Managing Director: 02 March 2011.

Interview, the Kuyasa Fund, CSC Representative: 11 February 2011; Nyanga.

Interviews, the Kuyasa Fund Loan Recipients 1-4: Day 1, 11 February 2011; Nyanga, New Crossroads and KTC.

Interviews, the Kuyasa Fund Loan Recipients 5-9: Day 2, 15 February 2011; Gugulethu and Nyanga.

Interview, Consultancy Company, Regional Representative: 22 February 2011; V&A Waterfront.

Interview, The Kuyasa Fund, Loan Collections Officer: 23 February 2011; Gugulethu.

Interviews, the Kuyasa Fund Loan Recipients 10-13: Day 3, 23 February 2011; Gugulethu.

Interview, the Kuyasa Fund, Cape Town Branch Manager and Customer Service Centre Manager: 24 February 2011; the Kuyasa Fund, Observatory.

Interview, MFI, Consultant: 01 March 2011; University of Cape Town.

Interview, MFI, Managing Director: 03 March 2011; Office in Observatory.

Interview, PlaNet Finance (MFI), Business Manager and Development Coordinator: 07 March 2011; Observatory.

Interview, the Kuyasa Fund, Operations Manager: 11 March 2011; the Kuyasa Fund, Observatory.

Interview, the Kuyasa Fund, Marketing Manager: 22 March 2011; the Kuyasa Fund, Observatory.

Interview, EZY Light, Founder and Engineer: 06 April 2011; Observatory.

Appendices

Appendix A

Key links between the environment and the Millennium Development Goals

1. Eradicate extreme poverty and hunger: Livelihood strategies and food security of the poor often depend directly on healthy ecosystems and the diversity of goods and ecological services they provide.
2. Achieve universal primary education: Time spent collecting water and fuel wood by children, especially girls, can reduce time at school.
3. Promote gender equality and women empowerment: Poor women are especially exposed to indoor air pollution and the burden of collecting water and fuelwood, and have unequal access to land and other natural resources.
4. Reduce child mortality: Water-related diseases such as diarrhea and cholera kill an estimated 3 million people a year in developing countries, the majority of which are children under the age of five.
5. Improve maternal health: Indoor air pollution and carrying heavy loads of water and fuel wood adversely affect women's health and can make women less fit for childbirth and at greater risk of complications during pregnancy.
6. Combat major diseases: Up to one-fifth of the total burden of disease in developing countries may be associated with environmental risk factors—and preventive environmental health measures are as important and at times more cost-effective than health treatment.
7. Ensure environmental sustainability: Current trends in environmental degradation must be reversed in order to sustain the health and productivity of the world's ecosystems.

The environment is important to achieving all seven MDGs. Source: Linking Poverty Reduction and Environmental Management, p. 11.

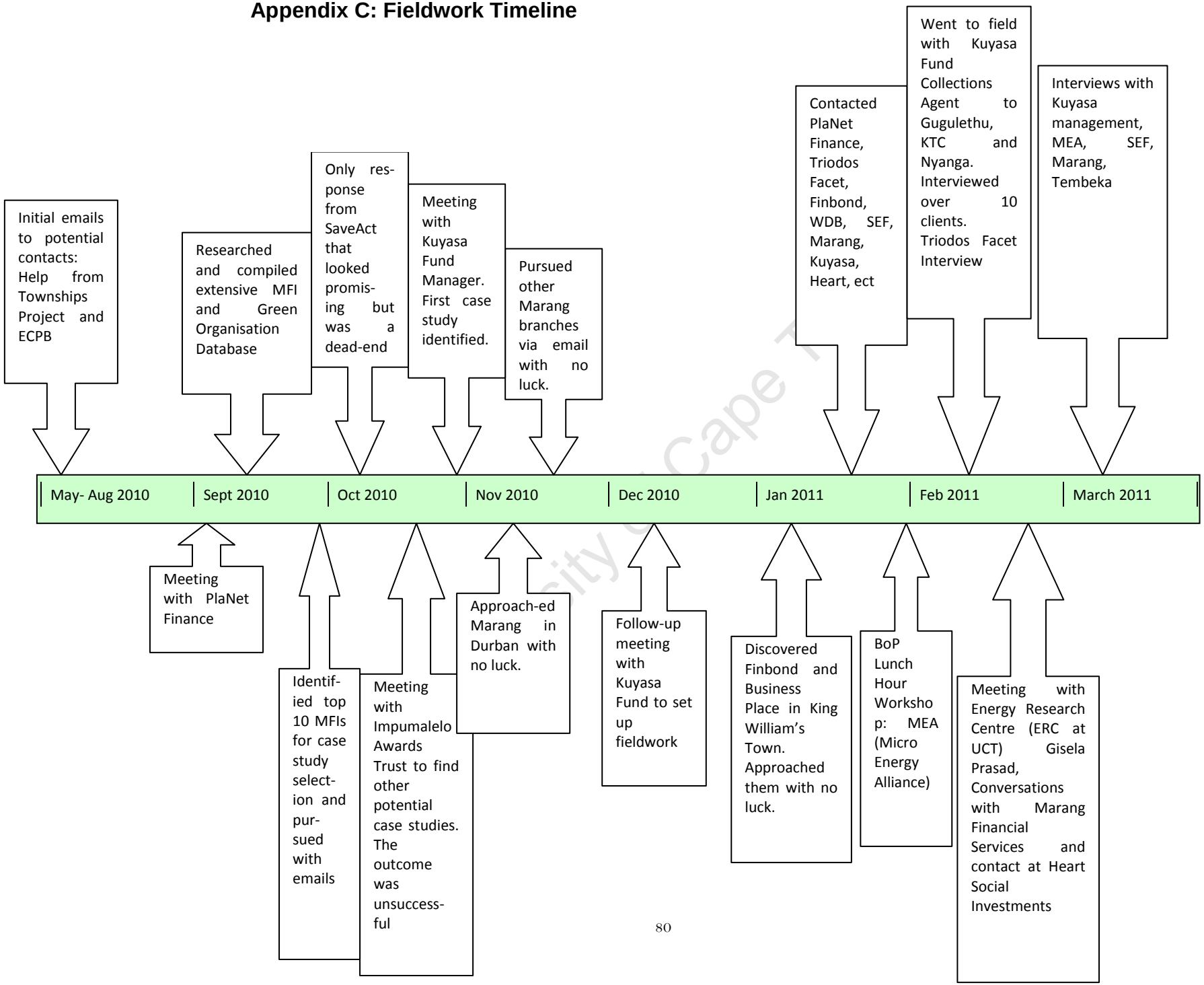
Appendix B

Microfinance Services and Livelihood Assets

MF Contribution/ Livelihood Type	Direct	Indirect
Financial	Cash/capital, savings, increase assets, diversify assets	Regular cash flows, financial safety nets, credit, increased financial management skills
Social	Strengthening networks/groups	Reinforce relationships of trust, reciprocity, safety nets, value, well-being, empowerment, sel-confidence
Natural	Sustainable management techniques as loan condition	Capital for investing in sustainable NRM practices, reduced pressure on natural resource base, enhanced skills, political empowerment
Human	Loans for education and healthcare, skills training	Literacy, knowledge base, better health, expanding workforce
Physical	Capital for equipment and infrastructure, housing and sanitation improvements	Better living environment and equipment

Microfinance has direct and indirect contributions for sustainable livelihoods. Source: Hammill, Richard and McCarter, 2008, p. 116

Appendix C: Fieldwork Timeline



Appendix D: Inventory of Development Finance Institutions[53]

Finance Institution	Country of Operation	Service Area	TBL/ Green?	Website	Description/ Projects
Act of Grace	South Africa	Western Cape	?	n/a	Financial intermediary supplied by the South African Microfinance Apex Fund (SAMAF). 0216964625/0820764260
Africa Unite	South Africa	Western Cape	?	n/a	Financial intermediary supplied by SAMAF. 0214677606
Artpac	South Africa	All	?	www.artpac.co.za	To become the unique and leading financier servicing the construction industry at the lower end of the market.
Beehive Entrepeneurial Development Centre	South Africa	Mpumalanga	?	n/a	michael@bedc.co.za / charmaine@bedc.co.za The Beehive EDC provides emerging and existing entrepreneurs with financial support whilst facilitating access to information and support services.
Care International	South Africa & Globally	Nationally	?	http://www.care.org/	Implements Village Savings and Loan Associations (VSLAs) which are complimentary to MFIs and allow rural people to save first before accessing micro-loans. Hluvukani Project: The focus of the project is on stimulating local economies by mobilizing savings through Voluntary Savings and Loans (VSL) model; facilitating the starting and strengthening of Income Generating Activities (IGAs) through the usage access of savings and income from VSL activities; scaling up of IGAs ran by VSL members into small businesses; exploring ways of linking VSL into the formal sector; and proactively documenting lessons learnt from project activities for dissemination and replication. Ogujini and Isithumba LED Assistant Project: Empowering women to convert their cooperatives into viable projects; - Empowering the cooperatives with technical skills that will help the development of projects that market focused; - Providing mentorship assistance

[53] This table is a comprehensive compilation of development finance institutions (DFIs) operating in South Africa discovered through phase one investigation of the study. The bolded text signifies the organisations identified as meeting the criterion for further phase two investigation. Additionally, many of these organizations informed the national context.

Finance Institution	Country of Operation	Service Area	TBL/ Green?	Website	Description/ Projects
Finbond	**Southern Africa**	**Nationally**	**No**	**http://finbond.co.za/**	**a leading Southern African MFI that specializes in the design and delivery of unique value and solution based ethical finance solutions tailored around borrower requirements rather than institutionalized lending policies. Finbond focuses on assisting clients in the emerging middle class that is formally employed, but under banked and underserved; gain access to finance and credit solutions. Finbond operates through 183 branches nationally under the Finbond Micro Finance brand. Finbond has emerged as one of South Africa's leading and fastest growing providers of unique finance solutions.** **King William's Town 23 Taylor Street 043 642 2084**
Great Financial Services	South Africa	Western Cape	?	n/a	Financial intermediary supplied by SAMAF. 0217618135/0795160889
Ingwavuma FSC	South Africa	Kwa-Zulu Natal	?	n/a	Financial intermediary supplied by SAMAF. 0826608066
Isidingo Financial Services	South Africa	?	?	http://www.loanshop.co.za/	Isidingo Financial Services is situated in the Sunnypark shopping centre in Sunnyside, Pretoria. It has practical experience in the microfinance industry and can assist with great advice, before taking a loan. The company is registered with the NCR (National Credit Regulator) and complies fully with the National Credit Act and its Regulations. A full affordability check is also done on each client, before Isidingo grant a loan, to make sure that the client can afford the repayment. The vision is to become the market leader in the microfinance industry by providing excellent service to customers in a professional and ethical way, through well-trained personnel, practical business systems and an accessible website. jaco@loantech.co.za After review, identified as not an MFI.
Ithala Development Finance Corporation	South Africa	Kwa-Zulu Natal	?	http://www.ithala.co.za/	As the facilitator for business development in KwaZulu-Natal, Ithala is ideally positioned to fine-tune the business needs of investors and entrepreneurs in the region. The short, medium and long term Ithala financial packages are offered to all qualifying businesses, no matter where in KwaZulu-Natal your business facility is located. Finance is available to small businesses, medium sized industrial concerns, commerce and tourism ventures, building contractors and more. 0319078922. Location : Umlazi. Rural Finance Institution supported by Khula. Not convinced that this is development finance as does not offer parallel services.

Finance Institution	Country of Operation	Service Area	TBL/ Green?	Website	Description/ Projects
THE KUYASA FUND (Identified as sole case study for this study)	**South Africa**	**Western and Eastern Capes**	**Y**	**http://www.thekuyasafund.co.za/**	**Rural and national housing loan funds. The Kuyasa Fund aims to contribute to sustainable households and communities through facilitating access to housing finance as a tool for improving well-being and supporting the development of a financial sector for the poor. We believe that the poorest of the poor are credit-worthy and that through mobilising savings they are able to build financial and social capital. We provide microfinance services to those with secure occupational rights who are excluded from formal finance, because no other appropriate sources of housing finance are available to low-income households. +27 21 4483144 info@kuyasa.org.za Identified as one case study. In contact with Zainab Panday regional manager**
Kwa Machi FSC	South Africa	Kwa-Zulu Natal	?	n/a	Financial intermediary supplied by SAMAF. 0394330377/0726390924
Marang	**South Africa**	**Limpopo, Mpumalanga, Eastern Cape, Kwa-Zulu Natal, Gauteng**	**?**	**http://www.marang.co.za/**	**Marang Financial Services is a micro-finance institution, incorporated as a section 21 company with a focus on making financial products accessible to the emerging entrepreneur and marginalised communities. Uses the Grameen model of lending. Gateway (Durban): 035 792 1756/ Town (Durban): 0358310800/ Umtata (EC): 0475322212, 039 255 0685, 047 532 3929/ Lusikisiki (EC) 039 253 1804/ Also Durban!!! Met with Sibongile Mthiyane in Durban with no luck.**
Mecene Investments	Africa	South Africa	Y	www.meceneinvestment.com	The company draws on its successful private equity experience in African microfinance industry to promote equity and debt investments in industries that provide high social, environmental and developmental impact. info@meceneinvestment.com
Micro-Agricultural Finance Scheme for South Africa (MAFISA)	South Africa	Nationally	Y	n/a	MAFISA is the state-owned scheme that provides access to micro and retail agricultural financial services to households, individuals and entrepreneurs in the rural areas on a nation-wide, commercial, cost-effective and sustainable basis. Leave the Land Bank to deal with commercial farmers while MAFISA supports entrepreneurs active in the agricultural sector. 021 483 4930/ 084 604 6701 avjaarsv@pgwc.gov.za

Finance Institution	Country of Operation	Service Area	TBL/ Green?	Website	Description/ Projects
Middledrift FSC	South Africa	Eastern Cape	?	n/a	Financial intermediary supplied by SAMAF. 0406573287/ 0787429148
Nations Trust	South Africa	?	?	n/a	To promote youth economic development by assisting un- or underemployed youth to start or expand businesses through the provision of enterprise finance
Ncedisizwe MCO	South Africa	Kwa-Zulu Natal	?	n/a	Financial intermediary supplied by SAMAF. 0846280959
Ndiza Finance	South Africa	Gauteng, Limpopo	?	http://www.ndizafinance.co.za/	To be an innovative social and developmental business, providing funding to viable micro and small businesses, thereby unlocking the true spirit of entrepreneurship amongst the poor in South Africa and beyond. Offers micro-business loans and support services. Email: ndizainfo@ndizafinance.co.za Name: Abel Baloyi Region: Limpopo Cell Number: 073 529 9030 Name: Setshedi Majoko Region: Gauteng Cell Number: 0836370482
New Business Finance	South Africa	Nationally	?	http://www.nbf.co.za/	CAPE TOWN: 5TH FLOOR, PROTEA PLACE, CORNER DREYER STREET AND PROTEA RD, CLAREMONT 7700 TEL: (021) 671 6263 FAX: (021) 671 6267 Offers micro-business finance and support services.(RFI)

Finance Institution	Country of Operation	Service Area	TBL/ Green?	Website	Description/ Projects
Opportunity International	**South Africa & Globally**	**?**	**?**	**http://www.opportunity.net/**	**The Opportunity International Network is comprised of regulated formal financial institutions and non-profit NGOs serving economically challenged families with microfinance. Because of its unique cultural context, South Africa has not responded well to the traditional micro-finance models that target unemployed, poor entrepreneurs. Opportunity offers a mix of loan products, including individual loans, group loans, and loans tailored to clients in the areas of education and agriculture. A typical first point of entry, especially for women, is the Trust Group, which brings together 10 to 30 entrepreneurs who elect leaders, receive training and pledge to guarantee each other's loans. Because the group guarantee replaces the need for collateral, credit becomes available to those previously locked out of formal financial services. The Trust Group model also strengthens the community, calling upon group members to support each other and encourage each other's success. Also offers savings and insurance tailored to this group.** **Also promotes insurance and savings.** **manfredk@opportunityfinance.co.za** **Opportunity International 2122 York Road Suite 150 Oak Brook, Illinois 60523 (toll-free) 800.7WE.WILL (793-9455) 630.242.4100 630.645.1458 (fax)** **SA Performance in 2009**
Paradigm Shift	**South Africa**	**?**	**?**	**http://www.shiftingparadigms.org/**	**non-profit organization pioneering church-based business training and microfinance as an outreach tool transforming the lives of the entrepreneurial poor. Paradigm Shift is committed to empowering South African churches to provide the poor in their surrounding communities with economic development coupled with discipleship. Offers business training and micro-credit services. Offers business trainging too. To date, there has been a 100 percent repayment rate on all microloans!** **South Africa Headquarters Paradigm Shift** **Private Bag X04, Suite #106** **Fontainbleau** **South Africa 2032** **Phone: +27 11 431 1880**

Finance Institution	Country of Operation	Service Area	TBL/ Green?	Website	Description/ Projects
SAVEACT	**South Africa**	**Eastern Cape, Kwa-Zulu Natal**	**Y**	**http://www.saveact.org.za/**	**SaveAct implements a hybrid model of community-based savings activities, which incorporates three complementary elements:** ○ **The formation and mentoring of savings and credit groups (SCGs) - financial services controlled and managed by the poor;** ○ **Life Skills Training (LST) - improving people's capacity to plan and act; and** ○ **Enterprise or Isiqalo training - developing capacity to engage in enterprise activity or follow more sustainable livelihood strategies. SaveAct has facilitated the training of several hundred people who hope to start or expand their own businesses motivated by their access to savings and loans through SaveAct groups.** **Contact Person : Anton Krone info@saveact.org.za** **123 Jabu Ndlovu Stree** **Pietermaritzburg TEL : +27 (0) 33 345 8455** **Kwazulu-Natal FAX : +27(0)86 689 4520 | +27(0)33 345 4199** **3201 CELL : +27 (0) 82 853 7812 EC: 039 737 3409** **South Africa**
Savings and Credit Cooperative League (SACCOL)	South Africa	Nationally	?	http://www.saccol.org.za/	A Savings and Credit Co-operative (SACCO) is a democratic, unique member driven, self-help co-operative. It is owned, governed and managed by its members who have the same common bond: working for the same employer, belonging to the same church, labour union, social fraternity or living/working in the same community. Has listed all its members across the country.
Sibanye	South Africa	Western Cape	?	n/a	Financial intermediary supplied by SAMAF. Cape: 0214233146 Gugulethu: 021 633 7618

Siyakhula	South Africa	All	?	n/a	siyakhula@telkomsa.net Siyakhula Micro Business Finance will provide financial assistance to aspiring and existing micro enterprises through out loan program, as well as growing the organisation by expanding our client base in order to develop significantly more micro businesses, to be sustainanble, and contribute to the local economy.
Finance Institution	Country of Operation	Service Area	TBL/ Green?	Website	Description/ Projects
Sizathina FSC	South Africa	Kwa-Zulu Natal	?	n/a	Financial intermediary supplied by SAMAF. 0823984208
Small Enterprise Foundation (SEF)	**South Africa**	**Limpopo**	**Y**	**http://www.sef.co.za/**	**The Small Enterprise Foundation (SEF) is a not-for-profit, pro-poor microfinance institution working towards the eradication of poverty by creating a supportive environment where credit and savings services foster sustainable income generation, job creation and social empowerment. +27 15 307 5837**
Stokvel Microfinance Corporation	South Africa	Cape Town	?	n/a	From CIPRO Database 6th floor BDO House 119 Hertzog Blvd, Foreshore
Teba Bank	South Africa	Nationally except Western areas	?	http://www.tebabank.co.za/	Teba Bank has a unique structure as it is wholly owned by a Trust, managed jointly by the National Union of Mineworkers (NUM) and Chamber of Mines, whose beneficiaries are the customers of the Bank.
Tetla Financial Solutions	South Africa	Western Cape	?	n/a	Started by Yvonne Radinku, Tetla Financial Solutions is a company incorporated in terms of section 21 of the Companies Act of 1937. Tetla was formally incorporated in September 2006 for the purpose of offering micro credit to people who survive though micro enterprise activities and those who wish to start up micro enterprises for survivalist purposes. The goal is to fulfil the mandate of the organization, which is to advance the development and empowerment of poor households in peri-urban and rural areas. 0214473844/0731478711

Finance Institution	Country of Operation	Service Area	TBL/ Green?	Website	Description/ Projects
Thuthukani Financial Services	**South Africa**	**Nationally**	**No**	**http://www.thuthukani.co.za/**	**Vision: To be a leading Southern African financial services group, providing financial services in the high growth sectors of the market, satisfying the needs of the target market with financial products, financial information and financial services and delivering acceptable returns to our shareholders.** **Mission: To consistently satisfy the needs of our target markets and building owner-entrepreneurial-managed companies subscribing to our business philosophy and values.** **We aim: To have above average owner-managers and personnel who are trained and developed to combine service with the relevant technology on a quality and user-friendly basis; To use the best management training and development techniques to unlock the potential of our employees; and To achieve quality in everything we do.**
Tiisha Finance Enterprise	South Africa	Limpopo	?	http://www.tiisha.org/	DTI Agency. Sam Mabunda (Chair person) 082 449 8968 082 449 8968 To be a sustainable Micro Finance Institution promoting economically active and sustainable rural societies in the Limpopo Province.
Tlholo	South Africa	Eastern Cape	?	n/a	tlholo@telkomsa.net To give disadvantaged communities access to loans in the Eastern Cape. Tlholo would like to see 90% of microbusinesses owned by women and make sure that they participate in local economic development. • +27 826633 7610
Townships Project	**South Africa**	**Western Cape, Gauteng**	**Y**	**http://www.thetownshipsproject.org/**	**Started informally in 1998 by Martha Deacon,** The Townships Project **has been a registered charity in Canada since 2004, providing microloans through local microfinance institutions (MFIs) in South African townships. Has projects that uses ABCD. I have been in contact with Martha. marthadeacon@thetownshipsproject.org**
Uvimba Finance	South Africa	Eastern Cape	?	http://www.uvimbafinance.co.za/home.html	Part of Eastern Cape Rural Finance Corporation.
Vengrow Capital	South Africa	Gauteng	?	n/a	Rural Finance Institution supported by Khula. 0118323301

Finance Institution	Country of Operation	Service Area	TBL/ Green?	Website	Description/ Projects
Vulindlela Development Finance Consultants	South Africa	?	?	n/a	Located in observatory. No information available on internet
Women's Development Bank (WDB)	**South Africa**	**Nationally**	**?**	**www.wdb.co.za**	**Banking on women concept** **MF centre: 013 752 5179** **Telephone: +27 11 341 9900 Facsimile: +27 11 341 9911** **E-mail: info@wdb.co.za**
World Vision	**South Africa & Globally**	**?**	**Y**	**http://www.worldvision.org.za/** **www.visionfund.org**	**World Vision is one of the largest Christian-based relief and development non-governmental organizations in the world. As a child-focused organization, we are working at the grassroots in approximately 100 countries all around the world. Has microfinance programmes in Africa.**
Ziboneleni SACCO	South Africa	Eastern Cape	?	n/a	Financial intermediary supplied by SAMAF. 039 252 0348/ 073 477 4839

Appendix E: Inventory of Environmental Partner Organisations[54]

Organisation	Country	Service Area	Environmental Focus?	Website	Description/ Projects
A Rocha	**SA and worldwide**	**SA**	**Y**	**http://www.arocha.org/za-en/index.html**	**A Christian nature conservation organization, our name coming from the Portuguese for "the Rock," as the first initiative was a field study centre in Portugal. A Rocha projects are frequently cross-cultural in character, and share a community emphasis, with a focus on science and research, practical conservation and environmental education.**
Abalimi Bezekhaya	**South Africa**	**Western Cape**	**Y**	**http://www.abalimi.org.za/**	**Welcome to Abalimi . We are an urban agriculture (UA) and environmental action (EA) association operating in the socio-economically neglected townships of Khayelitsha, Nyanga and surrounding areas on the Cape Flats near Cape Town, South Africa through urban agriculture and greening projects. This is for sustenance and commercial purposes. TEL /FAX: +27 (21) 371 1653** PHYSICAL ADRESS: **Cwango Cresent, (Cnr New Eisleben Rd and Lansdowne Rd, behind Shoprite Centre) Philippi, 7785** **EMAIL: info@abalimi.org.za**
Accelerated and Shared Growth Initiative, Eastern Cape (ASGISA-EC)	South Africa	Eastern Cape	Y	http://asgisa-ec.co.za/	AsgiSA Eastern Cape Pty Ltd was officially launched in May 2007. AsgiSA EC assists the provincial government in accelerating growth and development in the eastern part of the Eastern Cape, also known as the former Transkei. It forms part of the Provincial Growth and Development Plan (PGDP) which aims to halve poverty and unemployment by 2014 which was officially launched in 2006. Focus on agriculture, bio-fuel production, eco-tourism, water and forest development, renewable energy and sustainability. The first is to leverage the increased levels of public expenditure, especially investment expenditure, to promote small businesses and broad-based empowerment addressing such issues as access to finance, preferential procurement and a review of the impact of regulations on labour-intensive sectors. The development mandate that has led to the establishment of AsgiSA-EC rests on six pillars, namely: a) Agriculture and agro-processing aimed at managing 1 million livestock units and putting 40 000ha under irrigated cultivation and 500 000 ha under dry-land cultivation, focusing primarily on food as well as industrial crops for agro-processing and bio-fuel production; b) Forestry Development through 100 000 ha of new afforestation, the improved management of existing forests, and the development of downstream manufacturing opportunities in the timber industry;

[54] This table is a comprehensive compilation as part of phase one investigation to the study of environmental or other organisations operating in South Africa that may provide partnering services to MFIs and other development finance operations. The bolded text signifies organisations that were helpful to informing the study either through their websites or through personal correspondence and many have helped to inform the national context.

					c) Water resources development aimed at optimizing water resources in the Mzimvubu Catchment as a catalyst for agrarian transformation. Key areas of focus include using 640 million m3 for forestry, agricultural, livestock watering, domestic and industrial use in the surrounding area. d) Hydro-power and alternative energy aimed at generating 1 500 MW of clean, renewable energy. e) Tourism Development linking eco-tourism on the Wild Coast with the adventure hotspots of the Southern Drakensberg through a branded tourism corridor that includes Mandela's Birthplace and the Mandela Museum in Mthatha; and f) Addressing unsustainable human settlement patterns through the rural, urban and economic renewal of targeted areas. buza@asgisa-ec.co.za +27 43 735 1673 +27 87 700 9119
Partnering Organisation	**Country**	**Service Area**	**Environmental Focus?**	**Website**	**Description/ Projects**
African Co-Operative Action Trust (ACAT)	**South Africa**	**KZN**	**Y**	**http://www.acatkzn.co.za/**	**ACAT is a non-denominational, faith-based organisation committed to improving the livelihoods of the poor on a sustainable basis where poverty, resource degradation, malnutrition, unemployment, and HIV and AIDS are widespread.** **Our main focus areas include: increased food production, improved health and nutrition, improved income levels, the starting of enterprises, increased knowledge, skills, capacity, and education, addressing the HIV and AIDS pandemic, social mobilization, strengthening civil society, caring for and sustaining the environment, spiritual upliftment and transformation, how to implement sustainable development programmes.**
Agribusiness in Sustainable Natural African Plant Products (ASNAPP)	Africa	Stellenbosch	Y	http://www.asnapp.org/	info@asnapp.org To help create and develop successful African agribusinesses in the natural products sector, providing income, employment & development, through environmentally and socially conscious practices to produce high quality natural products for local, regional and overseas markets. 021 808 2918 Phone 021 808 2919 021 808 2919
Agricultural	South	?	Y	http://www.arc.agric.za/home.asp?	The ARC was established by the Agricultural Research Act 86 of 1990 (as amended) and is the principal agricultural research institution in South Africa. It is a schedule 3A public entity in terms of the Public Finance

Research Council (ARC)	Africa			pid=283	Management Act 1 of 1999, as amended by Act 29 of 1999.
Partnering Organisation	**Country**	**Service Area**	**Environmental Focus?**	**Website**	**Description/ Projects**
Agri-SA	South Africa	Nationally	Y	http://www.agrisa.co.za/	Agri South Africa (Agri SA) is a federal organisation, which promotes on behalf of its members, the sustainable profitability and stability of commercial agricultural producers and agribusinesses through its involvement and input on national and international level.
Alliance Micro Lenders Group	South Africa	Nationally	?	http://users.iafrica.com/a/al/alliance/index.html	Network The Alliance Micro Lenders Group is a voluntary association of independent micro lenders. It was established at the request of independant micro lenders and provides the following services to its members: • Investigates techniques, systems, procedures and legislation to ensure a safer, more effective and legal operation for its members • Negotiates access to means and services, better conditions, supplementary business opportunities and systems • Keep its members informed through well prepared, fully bilingual newsletters, memoranda, regional meetings, personal calls and visits, and • Provides management and business consulting as well as support on a group and individual basis. alliance@iafrica.com
Ashoka	South Africa & Globally	?	?	http://www.ashoka.org/	Supports social entrepreneurs financially and technically
Association for Pro Poor Microfinance Institutions South Africa (AMFISA)	**South Africa**	**All**	**?**	**http://www.amfisa.org.za/**	**AMFISA is a non-political association that recognizes that the struggles of the poor especially the very poor are gender based, political, economic, social and spiritual. Simply put, to be a microcredit practitioner is to see and recognize what the privileged and sometimes the workers do not see and that is the systematic exclusion of the poorest by the market.The AMFISA currently represents 14 developmental microcredit institutions that have reached an estimated 100,000 clients over the last fifteen years. Over a hundred million has been disbursed to small and survivalist businesses. The first developmental microcredit institutions existed before the new SMME dispensation that arose out of the Strauss Commission and the National Small Business Act of 1996.**
Association for Water and Rural Development (AWARD)	South Africa	?	Y	http://www.award.org.za/home/default.asp	an NGO in South Africa that works on water supply in the broader context of managing water resources and their wise use, with a focus on learning about water security issues in the Sand River Catchment area. Focus on sustainable development, rainwater harvesting, vulnerability.

Partnering Organisation	Country	Service Area	Environmental Focus?	Website	Description/ Projects
Barefoot Power	**Worldwide**		**Y**	**http://www.barefootpower.com/**	**Rural Electrification. Grassroots supply chain for current technology. Africa - Harry Andrews: harrya@barefootpower.com**
Biodynamic Agricultural Association of South Africa (BDAASA)	Southern Africa			http://www.bdaasa.org.za/about.html	Practicing/supporting biodynamic farming where the organic aspects of agriculture meet natural forces of earth.
Bio Watch	South Africa	Kwa-Zulu Natal, Western Cape	Y	http://www.biowatch.org.za/	Biowatch strives to prevent biological diversity from being privatised for corporate gain. We aspire to an environment where people control their food supply systems, where the benefits from commercial use of biological resources are fairly shared and where ordinary citizens are encouraged to help make policy choices about new technologies, such as, genetic modification. We are working towards a future where there is no hunger, where there is social justice and where our land, water and air is protected. +27 (0) 31 206 2954 For more information please contact Lawrence Mkhalipi from Biowatch South Africa on 035 551 1206 035 551 1206 or 082 958 1912 082 958 1912
The Business Place	**South Africa**	**Nationally**	**?**	**http://www.tbp.co.za/default.aspx**	**The Business Place is a network of walk-in centres for entrepreneurs - with relevant support and information services clustered under one roof. It has emerged as a leading small, medium and micro enterprise (SMME) development service in Southern Africa.** **We have a strong (but not exclusive) focus on the youth. Anyone who wants to start or grow a small business or micro enterprise is welcome.** **We create an inspirational, enabling environment that stimulates creativity, innovation and opportunity in order to unleash individual potential.**
Centre for Development and Enterprise (CDE)	South Africa	All	?	http://www.cde.org.za/page.php?p_id=1	an independent policy research and advocacy organisation. It is one of South Africa's leading development think tanks, focusing on critical national development issues and their relationship to economic growth and democratic consolidation. Through examining South African realities and international experience, CDE formulates practical policy proposals outlining ways in which South Africa can tackle major social and economic challenges.

Partnering Organisation	Country	Service Area	Environmental Focus?	Website	Description/ Projects
Centre for Environment Agriculture and Development (CEAD)	South Africa	Kwa-Zulu Natal	Y	http://www.cead.org.za/About/index.asp	Not available on the website
Community Microfinance Network	South Africa	?	?		The Community Microfinance Network is an informal grouping of South African not-for-profit institutions primarily committed to alleviating poverty by providing financial services to the poor, particularly the very poor. Its members include microcredit NGOs, informal savings and credit networks, and financial services co-operatives. Its objectives are to: • Sector strengthening: Providing institutional space and resources for focused interaction between community microfinance institutions, in order to strengthen their individual and collective development practice; • Advocacy: To define, document, and raise awareness of the activities of community microfinance institutions in Southern Africa in order to influence policy processes; • Representation: To assist community microfinance institutions to develop common positions on practical, policy and regulatory issues affecting them, in order to participate in a unified way. tedb@cmfnet.org.za
Companies and Intellectual Property Registration Office (CIPRO)	South Africa	All	?	http://www.cipro.co.za/	0861 843 384 Database of listed companies
Conservation International	SA and worldwide	?	Y	http://www.conservation.org/Pages/default.aspx	While our largest office is in the U.S. (in Arlington, Virginia – near Washington, DC), the majority of CI's staff work in offices or field sites in locations around the world. This work takes many forms – from coordinating scientific surveys to training local leaders to advocating for sustainable policies at the national and international level. Our staff is dedicated to finding innovative, scalable solutions to the global environmental loss that threatens all life on Earth.

					South Africa Kirstenbosh National Botanical Garden Private Bag X7 Claremont, South Africa
Partnering Organisation	**Country**	**Service Area**	**Environmental Focus?**	**Website**	**Description/ Projects**
Consultative Group to Assist the Poor (CGAP)	Worldwide		?	http://www.cgap.org/	CGAP is an independent policy and research center dedicated to advancing financial access for the world's poor. It is supported by over 30 development agencies and private foundations who share a common mission to alleviate poverty. Housed at the World Bank, CGAP provides market intelligence, promotes standards, develops innovative solutions and offers advisory services to governments, microfinance providers, donors, and investors.
Department of Environmental Affairs and Tourism (DEAT)	**South Africa**	**All**	**Y**	**http://www.environment.gov.za/**	**To lead sustainable development of our environment and tourism for a better life for all, through: Promoting the conservation and sustainable utilisation of our natural resources to enhance economic growth, Protecting and improving the quality and safety of the environment, Promoting a global sustainable development agenda, Transformation**
Department of Trade and Industry (DTI)	**South Africa**	**All**	**?**	**http://www.dti.gov.za/**	**Houses SEDA, Kula Finance and SAMAF. 0861 843 384**
Department of Water Affairs and Forestry (DWAF)	**South Africa**	**All**	**Y**	**http://www.dwaf.gov.za/**	**The Department of Water Affairs is the custodian of South Africa's water resources. It is primarily responsible for the formulation and implementation of policy governing this sector. It also has override responsibility for water services provided by local government. While striving to ensure that all South Africans gain access to clean water and safe sanitation, the water sector also promotes effective and efficient water resources management to ensure sustainable economic and social development.** **Ms Motshidisi Baloyi** **Tel: +27 12 336 8281 +27 12 336 8281** **Fax: +27 12 336 8664** **E-mail: BaloyiMo@dwaf.gov.za**
Development Bank of Southern Africa (DBSA)	Southern Africa	South Africa	?	http://www.dbsa.org/pages/default.aspx	The Development Bank of Southern Africa (DBSA) is one of several development finance institutions in South and Southern Africa. Its purpose is to accelerate sustainable socio-economic development by funding physical, social and economic infrastructure. DBSA's goal is to improve the quality of life of the people of the region.

Partnering Organisation	Country	Service Area	Environmental Focus?	Website	Description/ Projects
E+ Co	SA and Worldwide	?	Y	http://eandco.net/	E+Co makes clean energy investments in developing countries. With 15 years of experience and offices in 8 locations, E+Co's innovative business model provides lasting solutions to climate change and poverty. No. 11 Pieter Street, Highveld Technopark, Centurion, South Africa Tel: +27.12.665.3454 +27.12.665.3454 EandCo.Africa@EandCo.net
Eastern Cape Development Corporation (ECDC)	**South Africa**	**Eastern Cape**	**Y**	**http://www.ecdc.co.za/**	**ECDC is a dynamic economic development agency in the Eastern Cape. ECDC works with provincial and national ministries, municipalities, chambers, private business, communities and other development agencies to implement the economic development policies of the Eastern Cape provincial government. Has projects in agricultural, aquacultural, tourism, craft and renewable energy sectors**
Eastern Cape Rural Finance Corporation Act	South Africa	Eastern Cape		www.ecrfc.co.za	Telephone number: 043-604 7000 Fax number: 043-642 5824 E-mail address: masanaboj@ecrfc.co.za
Eastern Cape Socio Economic Councile (ECSECC)	South Africa	Eastern Cape	?	http://www.ecsecc.org/	Our vision is for a poverty free Eastern Cape where all people have equitable access to social services and fully benefit the economy.
Energy & Development Group	Sub-Saharan Africa	?	Y	http://www.edg.co.za/	Energy & Development Group (EDG) is an international consultancy with 18 years experience in energy policy, rural development initiatives, renewable energy and rural energy project management and implementation. EDG promotes access to energy services for sustainable development in Sub-Saharan Africa. EDG was established to provide high quality consultancy services in the energy and development sector to address the backlog in provision of services to the rural poor in Africa. EDG maintains offices in South Africa and Uganda. +27 (0)21 465 9790

Partnering Organisation	Country	Service Area	Environmental Focus?	Website	Description/ Projects
Eco City	South Africa	Gauteng	Y	http://www.ecocity.org.za/	The EcoCity Trust is the custodian of the EcoCity Concept, developed organically over the past 10 years. Borne from activist work, when communities rejected current development paradigms, the project seeks alternatives supporting sustainable development. Tel: +27 11 407 6726 +27 11 407 6726 Fax: +27 11 403 7904 Email: trust@ecocity.org.za
Environmental and Social Risk Audit (ESRA)	Worldwide	All	Y	www.greenmicrofinance.org	tool to help MFIs minimize the negative environmental and social impacts of the microenterprises they support. ESRA combines positive and negative approaches to promote greater environmental consciousness among MFI staff and clients and to bring clients' business practices in line with sound environmental practices. The ESRA includes support tools, a course, and internet support to help MFIs build an environmental and social (E&S) risk management system. It is highlighted here as a good example of an integrated approach to environmental management. A premise underlying the ESRA is that social and environmental factors must be included with other (traditional) factors in making loan decisions. The ESRA breaks the lending process into four phases—application, appraisal, contracting and disbursement, and reporting—and integrates environmental and social risk assessment into each phase.
Fair Trade	South Africa	Nationwide	Y	http://www.fairtrade.org.za/	Fair Trade is a global movement that aims to improve production and trading conditions to benefit smallholders, farm workers and disadvantaged employees and artisans. You are currently on the Fair Trade South Africa website. "Fair Trade is a trading partnership, based on dialogue, transparency and respect, that seeks greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers and workers – especially in the South. Fair Trade organisations, backed by consumers, are engaged actively in supporting producers, awareness raising and in campaigning for changes in the rules and practice of conventional international trade".
Finmark Trust	Southern Africa	?	?	http://www.finmark.org.za/new/pages/default.aspx	FinMark Trust was established in March 2002 with funding from the UK's Department for International Development (DFID). FinMark Trust is an independent trust whose business is controlled by five trustees from countries in Southern Africa. FinMark Trust's purpose is 'Making financial markets work for the poor, by promoting financial inclusion and regional financial integration'. It does this by conducting research to identify the systemic constraints that prevent financial markets from reaching out to these consumers and by advocating for change on the basis of research findings.
FMO	South Africa, World Wide	All	Y	http://www.fmo.nl/	Entrepeneurial development bank that focuses on housing, energy and finance. Mail Info@fmo.nl

Partnering Organisation	Country	Service Area	Environmental Focus?	Website	Description/ Projects
Forest Stewardship Council	SA and Worldwide	?		http://www.fsc.org/	What began in as not much more than an innovative idea has turned into the leading model for environmentally appropriate, socially beneficial and economically viable *forest stewardship*. Today, FSC is the only internationally recognized standard setting organization for responsible forest management supported by the corporate sector as well as environmental organizations and social groups. FSC South Africa Type FSC National Initiative - *Contact Person* Contact John Scotcher E-Mail jscotcher @forestlore.co.za Phone ++ 27 (0) 33 3302330 27 (0) 33 3302330
Green Buck	Worldwide	?	Y	n/a	Guide: This guide is intended to provide an introduction for the non-specialist to some of the approaches that economics can offer. Rather than being focused on economic theory, it demonstrates the ways in which economics can be used, illustrated by case-studies from around the WWF network where economics has contributed to conservation. Importantly, this guide is not intended to offer a complete overview of all the economic approaches available, only some of the most common. the guide is divided according to three of the main ends to which environmental economics can be put: generating increased finance for conservation; creating markets that support conservation; and influencing government plans and programmes that impact on biodiversity. This document is from the WWF Sustainable Economics Network.
Heart	**South Africa**	**Western Cape**	**Y**	**http://www.heartglobal.org/**	**Offers business services to underprivileged people: the hub (workspace), incubator (start-up social enterprise), the fund (manages socially conscious investors). Has numerous social enterprises such as food tents.**

Partnering Organisation	Country	Service Area	Environmental Focus?	Website	Description/ Projects
Impumelelo Awards	**South Africa**	**Nationally**	**Y**	**http://www.impumelelo.org.za/**	**Impumelelo's award winners clearly demonstrate that there are 'South African solutions to South African challenges'.** • **To improve the quality of life of the poor;** • **To identify and highlight innovative and effective examples of service delivery in the country;** • **To encourage good governance;** • **To reward initiatives that break through fiscal and structural delivery constraints;** • **To highlight models of innovative government projects in order to encourage replication;** • **To recognise public and social entrepreneurs who are the backbone of exemplary programmes;** • **To provide compelling and credible portraits of the many ways in which government contributes to public problem-solving;** • **To support replication of good governance projects through case studies, training, policy analysis, and research.** **The Impumelelo Innovations Award Trust** **5th Floor, Constitution House** **124 Adderley Street** **Cape Town** **8001** **info at impumelelo dot org dot za / rhoda at impumelelo dot org dot za**
Independent Development Trust (IDT)	South Africa		?	http://www.idt.org.za/	The IDT is a South African development agency that offers programme management and development advisory services for the eradication of poverty to government departments and other development partners. Emphasis is on the eradication of chronic intergenerational poverty, especially among the rural poor.

Partnering Organisation	Country	Service Area	Environmental Focus?	Website	Description/ Projects
International Fund for Agriculture and Development (IFAD)	SA, worldwid			http://www.ifad.org/	UN Agency. Eradicating rural poverty and the food crisis in developing countries. Our focus is on poor, marginalized and vulnerable rural people. They are small farmers, landless people, labourers, herders, artisanal fishers and small-scale entrepreneurs who depend on agriculture and related activities to survive. IFAD mobilizes resources from its 165 member countries to provide low-interest loans and grants to middle and lower-income members to finance poverty reduction programmes and projects in the world's poorest rural communities. 1. Natural resources, especially secure access to land and water, and improved natural resource management and conservation practices 2. Improved agricultural technologies and effective production services 3. A broad range of financial services 4. Transparent and competitive markets for agricultural inputs and produce 5. Opportunities for rural off-farm employment and enterprise development 6. Local and national policy and programming processes The African Rural Credit Association (AFRACA) was established in 1977. AFRACA is a non-profit association of sub-Saharan African financial institutions. Its goal is to promote policy frameworks and support member institutions in providing sustainable quality financial services to the rural population of the region. Tel: 39-0654591 E-mail ifad@ifad.org
International Network of Alternative Financial Institutions (INAFI)	South Africa and worldwide	South Africa	?	http://www.inafi.org/	INAFI envisions a world where the poor are empowered and given the opportunity to enjoy sustainable livelihood through affordable alternative financial services and active participation in their own development. A world where even the poorest of the poor enjoy life with dignity, sufficient food, and income security to meet basic needs including shelter, clothing, healthcare, and education.
Khula	**South Africa**	**All**	**?**	**http://www.khula.org.za/**	**Wholesale financiers. At mercy of SA National Treasury. Employs rigid conditionalities. Unsuccessful due to MFIs shutting down (except for New Business Finance). Its primary aim is to bridge the "funding gap" in the SME market not addressed by commercial financial institutions**

Partnering Organisation	Country	Service Area	Environmental Focus?	Website	Description/ Projects
Land Bank	South Africa	All	Y	http://www.landbank.co.za/	Micro MBA and credit buffer. The Land and Agricultural Development Bank of South Africa has been the leading agricultural financier in South Africa since its inception 1912. Land Bank offers tailor made financial services to established and emerging farmers. Land Bank Cape Town: Corporate Finance P O Box 4235 Tygervalley 7536 Tel (021) 487 9500 (021) 487 9500 e-mail: cfuctn@landbank.co.za
Landmark Foundation	SA		Y	http://www.landmarkfoundation.org.za/	The Landmark Foundation is a conservation NGO that promotes and facilitates conservation land uses in Southern Africa. We do this through: Protected area expansion work, Tourism development, Local economic development that concentrates on conservation, Waste recycling, Renewable energy development, and Species conservation. Our main activities are: 1. Leopard & Predator Conservation 2. Fair Game™ - wildlife-friendly product development 3. Upper Tsitsa Falls Tourism and Agriculture Project 4. Solar Power Solutions for Southern Africa 5. Madiba Corridor Project 6. Landmark Foundation's DIY Insulation Board Project 7. Skilderkrantz Private Nature Reserve and Conservation Initiative 8. Amathole Mountains Biosphere Reserve Project 9. Baviaanskloof East Conservancy Development 10. Garden Route to Addo Conservation Corridor 11. Umzi Wentaba Project - Great Fish River 12. Southern Drakensberg Transfrontier Conservation Initiative 13. WildMark (UK) Dr Bool Smuts Director Landmark Foundation

					Cell: 083 324 3344 Email: bool@landmarkfoundation.org.za
Partnering Organisation	**Country**	**Service Area**	**Environmental Focus?**	**Website**	**Description/ Projects**
Maloti-Drakensburg Transfrontier Project (MDTP)	South Africa	Eastern Cape and Kwa-Zulu Natal	Y	http://maloti.opencms.co.za/site/	A collaborative initiative between SA & Lesotho to protect the exceptional biodiversity of the Drakensberg and Maloti mountains through conservation, sustainable resource use, and land-use and development planning. This area encompasses distinct landscape and biological diversity. Excessive livestock grazing, crop cultivation on steep slopes, uncontrolled burning, alien invading species and human encroachment threatens this asset. This five-year project takes a regional and ecosystem approach to conservation and development, and serves to promote biodiversity conservation through linkages with community development based on realization of the region's high potential for nature–based tourism. Focuses on areas such as community involvement, sustainable tourism and conservation planning. info@maloti.org 27 033 239 1880
Microcaptial	Worldwide	All	?	http://www.microcapital.org/	Good database for current information and resources
Microfinance Gateway	**SA and worldwide**	**All**	**Y**	**http://www.microfinancegateway.org/p/site/m/**	**A service of CGAP, the Microfinance Gateway is the most comprehensive online resource for the global microfinance community.**
Microfinance Information Exchange (MIX)	**South Africa and worldwide**	**All**	**?**	**www.mixmarket.org**	**The leading business information provider dedicated to strengthening the microfinance sector. The organization's core focus is to provide objective data and analysis on microfinance providers. In doing so, MIX promotes financial transparency in the industry and helps build the information infrastructure in developing countries. This addresses a key challenge for the microfinance industry: the lack of reliable, comparable and publicly available information on the financial strength and performance of microfinance institutions as well as their social impact.**
Microfinance South Africa (MFSA)	SA	SA	?	http://www.mfsa.net/new/	The MFSA is the Voice of Reputable Microfinanciers in South Africa. Our vision is to ensure a sustainable Micro Finance Industry. We are committed to promoting the interests of all members and their clients through: • continuous advocacy • creation of development and growth opportunities • facilitation of member interaction We are the only association providing you with these services. Membership of MicroFinance South Africa has never made more sense.
Micro-MBA	Southern	Johannesbu	?	http://www.micromba.com/index.	provides a solution to these needs. It empowers employees with basic business knowledge and offers the

	Africa	rg and Cape Town		php	unemployed people a ladder of opportunity that enables them to start on the road to economic independence in only 3 months at a total cost of R1 800,00.
Partnering Organisation	**Country**	**Service Area**	**Environmental Focus?**	**Website**	**Description/ Projects**
The Mvula Trust	South Africa	Most of the country	Y	http://mvula.org.za/	The Mvula Trust's mission is to improve the health and welfare of poor and disadvantaged South Africans in rural and peri-urban communities by increasing their access to safe and sustainable water and sanitation services. · Promoting the productive use of water for sustainable livelihoods, food security and shared growth, based on household rainwater harvesting reservoirs.· Mobilising poor households to become self reliant through rediscovering their own potential and self worth.
Planet Finance	**South Africa and Worldwide**	**Cape Town**	**Y**	**http://www.planetfinancegroup.org/**	**PlaNet Finance is an international organisation whose mission is to fight against poverty through the development of microfinance. As the microfinance expert, PlaNet Finance offers a set of services via eight independent and specialised units whose primary objective is to develop an inclusive financial sector. From CIPRO Database** **28 Roodebloom Road** **Woodstock**
Promotion of Rural Livelihoods Programme (RULIV)	South Africa	Eastern Cape	Y	www.ruliv.org.za	It aims at improving the livelihoods and business development of the rural population of the Eastern Cape Province by identifying appropriate competitive sectors, planning process and approaches, implementing and/or testing those in close cooperation with communities, municipalities, government departments and agencies, and service providers and sharing lessons learnt with key partners. Economic development (including agriculture) and natural resources management an innovation and development organization, towards assisting public and private organizations with planning and management by invoking tested best (promising) practices. Government departments, municipalities, business and NGO/CBO's are all targeted clients and

					partners of RuLiv in the context of local economic development (LED, but not without the deliberate consideration of sustainable community based natural resources management – CBNRM), Current Projects: Sorghum (farmers trained on conservation methods of sustainable production) Machumbeni CBNRM Rehabilitated & protected erosion dongas; • Restored wetlands and improved rangeland; • Installation of 4 nurseries for production of vegetable material for land rehabilitation and production of seedlings for woodlots and reforestation; • Installation of 5 spring catchments for drinking and irrigation water; • Rehabilitation of woodlots; • Installation of 10 SME's (small & mirco enterprises); • Community awareness raising and education on range land management, environmental issues and institution building. Nqabarha CBNRM The aim of the Project is to implement strategic and innovative concepts and projects around the role of Community Based Natural Resource Management (CBNRM) in local economic development through Participatory Forest Management. Thus, the project will simultaneously assist in bringing poverty relief to the Nqabarha area and promoting sustainable use of natural resources.
Rand Trust	South Africa	All	?	http://www.randtrust.co.za/default.asp	Provides working capital finance against receivables of growing, profitable SMEs. Tender System. Filled with corruption and poor service delivery
Restio Energy	**South**	**All**	**Y**	**http://www.restio.co.za/**	**Focus on improvement of clean energy service delivery to all. Offers a range of environmentally friendly**

	Africa				**services and products. Also runs various projects and research.**
Schneider Electric	South Africa & Globally	All	Y	http://www.schneider-electric.co.za/sites/rsa/en/home.page	Offer a range of energy efficiency solutions, products, services and support. Prepaid meter installation to rural areas. Also has Sustainable Development Foundation.
Partnering Organisation	**Country**	**Service Area**	**Environmental Focus?**	**Website**	**Description/ Projects**
Small Enterprise Development Agency (SEDA)	**South Africa**	**All**	**?**	**www.seda.org.za**	**DTI agency for supporting small businesses.**
Social Change Action Trust (SCAT)	SA	SA	?	http://www.scat.org.za/	A South Africa with vibrant sustainable rural communities. To partner with rural community-owned organisations in order to contribute effectively to rights-based endeavors that improve the quality of life in their communities.
Southern African Alternative Energy Association (SAAEA)	Southern Africa	?	Y	http://saaea.blogspot.com/p/about-us.html	Southern African Alternative Energy Association (SAAEA) represents and actively promotes Renewable Alternative Energy Solutions in our region. Its focus is the whole industry, rather than one sector. Wind, Solar, Bio Fuels, Green Products, Energy Saving, Alternative Energy, Energy from Waste, Fuel Cell Technologies. saaea2@gmail.com
South African Institute for Entrepreneurship (SAIE)	South Africa	Cape Town	?	www.entrepreneurship.co.za	Collingwood Place 11 Drake Street Observatory 7925 Cape Town South Africa info@entrepreneurship.co.za +27 21 447 2023 The SAIE develops innovative materials that utilize original, creative methodologies; and trains educators, trainers and community-based organisations to convey business skills, uncover entrepreneurship qualities and ensure sustainable economic development and wealth creation.
South African Microfinance	**South Africa**	**All**	**?**	**http://www.samaf.org.za/**	**Funds Kuyasa. An initiative of the Department of Trade and Industry which was set up to provide wholesale microfinance services to the rural poor across. We provide microfinance to samaf funded financial**

Apex Fund (SAMAF)					**intermediaries such as Financial Services Cooperatives (FSC's) and Microfinance Institutions (MFI's) who on-lend to their members and clients respectively. Therefore, anyone who wants to obtain a loan should first join an FSC or apply to the MFI for a loan. The Micro-enterprise loan is offered to the financial intermediaries who on-lend to the poor people to establish and grow their micro survivalist businesses. To qualify, one must earn not more that R3 500 per month. On the other hand, Development loans are aimed at FSC's and MFI's for on-lending to clients (household earning R1 500 and below per month. Clients can use development loan for paying school fees, medical fees and improvements to the household. KwaZulu- Natal Provincial Manager: Mr Thanda Madlala Physical Address: 127 Alice Street SEDA ETHEKWINI Durban 4000 Tel:0313095850 0313095850 Cell:0716049640 Email: thandam@samaf.org.za Western Cape Provincial Manager: Mr Mark Alard Physical Address: 2 long Street, 9th floor, FNB Building Cape Town 8001 Tel:0214256774 0214256774 Cell:0716056826 Email: marka@samaf.org.za Also has financial intermediaries throughout the country**
Surplus Peoples Project (SPP)	South Africa	Western Cape	Y	http://www.spp.org.za/	Surplus People Project (SPP) advocates for pro poor agrarian reform and food sovereignty. We believe that the rural economy can be transformed through land, water and agricultural reform. We support and build grassroots organisations & movements of small-scale farmers, farm dwellers and women in the Western and Northern Cape, through a process of political education, social mobilisation, institutional and agricultural development and research. Key areas: agrarian reform and agro-eco farming. spp@spp.org.za 45 Collingwood Road Observatory 7925 PO Box 468, Athlone 7760 Cape Town South Africa Email: spp@spp.org.za Telephone: +27 21 448 5605

					Fax: +27 21 448 0105
Sustainability Institute	South Africa	Western Cape	Y	http://www.sustainabilityinstitute.net/	The Sustainability Institute is a non-profit trust, founded in 1999. An international living and learning centre focussing on studies and experience in ecology, community and spirit, we work in partnership with the *School of Public Management and Planning, University of Stellenbosch*
Tembeka	**South Africa**	**All**	**?**	**http://www.tembeka.co.za/**	**Tembeka Social Investment Co. Ltd. is a South African social investment company that seeks to promote sustainable development in poor communities by initiating and acting in a chain of Financial Solidarity.**
Partnering Organisation	**Country**	**Service Area**	**Environmental Focus?**	**Website**	**Description/ Projects**
Transkei Land Service OrganIsation (TRALSO)	South Africa	Eastern Cape	Y	http://www.tralso.co.za/	This program aims to achieve productive and sustainable use of land and contribute to (or influence) formulation of conducive land use policies. The miracle of post apartheid South Africa is marred by growing de-agrarianisation of rural communities, mass unemployment, violent crime, moral degeneration and pandemics such as HIV/AIDS. Rural, peri-urban and informal dormitory settlements characteristic of the Eastern Cape have proven most vulnerable to this phenomenon. The primary causes are modernisation, rampant commoditization of basic necessities and injudicious management of the environment. TRALSO believes in the right of rural people to choose, and be afforded the means to pursue a path that revives and preserves their proud traditions of food sovereignty, social cohesion, democratic processes and venerable moral standards. The Agrarian Transformation Programme aims to build productive, cohesive and resilient communities around land by; • Offering informed critique of the dominant policy and implementation paradigms • Offering practical, demonstrable, sustainable and ecologically friendly alternative rural livelihoods solutions • Building community platforms to voice demands around rural development, land and agrarian reform and gender issues. Telephone +27 47 531 2851/2 Facsimile +27 47 531 2853 Email admin@tralso.co.za
Triodos Facet	**Worldwide**	**Nationally**	**Y**	**http://www.triodosfacet.nl**	**A consultancy company that specialises in the promotion and development of SMMEs that contribute to sustainable development. We support the triple bottom line of economic growth, social development and**

					environmental improvement.
University of Pretoria	South Africa	Pretoria	Y	www.microfinance.up.ac.za	The Centre was established in 2004. The Centre is a member of the Microfinance Management Institute's (MFMI) global community, which includes 65 training and academic institutions from over 29 countries in Africa, Asia, Latin America, the Middle East and Europe. It aims to improve capacity in microfinance institutions. katherine.blaine@up.ac.za mailto:gerhard.coetzee@up.ac.za +27 12 420 3344
Partnering Organisation	**Country**	**Service Area**	**Environmental Focus?**	**Website**	**Description/ Projects**
Valley Trust	SA	Kwa-Zulu Natal	Y	http://www.thevalleytrust.org.za/	We enable people to initiate and sustain their own developmental change processes. Various empowerment projects, some with an environmental focus. Land and Plant Use Programme The purpose of the programme is to facilitate the exchange and further development of ideas and practises that enable people to manage plants, land and water using ethical technologies in ways that are meaningful and secure livelihoods. Strategies used are creation of a supportive environment for the exchange, health promotion and management of biodiversity. info@vtrust.org.za 27 31 716 6800
Wilderness Foundation	South Africa and worldwide	SA	Y	http://www.wildernessfoundation.co.za/content.asp?PageID=1&menuid=116	The Wilderness Foundation is a project driven conservation organisation that strives to create opportunities for economic and social equality and achieves its mission by initiating and implementing programmes that are concentrated in four main areas: Conservation; Social; Advocacy and Awareness; and Experiential Education. info@sa.wild.org +27 (0) 41 - 3730293
Women in Informal Employment: Globalizing and Organizing (WIEGO)	worldwide		Y	http://www.wiego.org/about/	a global research-policy network that seeks to improve the status of the working poor, especially women, in the informal economy. It does so by highlighting the size, composition, characteristics, and contribution of the informal economy through improved statistics and research; by helping to strengthen member-based organizations informal workers; and by promoting policy dialogues and processes that include representatives of informal worker organizations. The common motivation for those who join the network is the relative lack of recognition, understanding, and support for the working poor in the informal economy, especially women, by policy makers, economic planners, and the international development community.
World Bank	SA and Worldwide	?	Y	www.worldbank.org	• Renewable Energy Market Transformation. The project has an overall cost of US$17.3 million, and is being funded by a US$6 million grant from the Global Environment Facility (GEF), US$2.3 million contribution from the South African government and US$9 million leveraged from the private sector. Its objective, over a four-year period, is to remove the barriers and reduce implementation costs of renewable energy technologies to help mitigate greenhouse gas (GHG) emissions. • Durban Landfill Gas-to-Electricity Project. The objective of this project is to reduce greenhouse gas

					emissions thourhg the use of landfill gas to generate electricity from the the La Mercy and Mariannhill landfill sites located within the boundaries of the eThekwini Municipality (South Africa). • ZA-C.A.P.E.: Biodiversity Conservation and Sustainable Development Project.The project will support South Africa's efforts to conserve the Cape Floristic Region, the smallest and most threatened floral regions of the world. It will build on the very successful Cape Strategy and Action Plan (C.A.P.E.) which was developed with GEF resources through the World Bank in 2000.