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**ENTERPRISE DEVELOPMENT AND WOMEN ENTREPRENEURSHIP IN
THE RENEWABLE ENERGY INDEPENDENT POWER PRODUCER
PROCUREMENT PROGRAMME IN SOUTH AFRICA**

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*A Research Report submitted to the Faculty of Commerce, Law and Management,
University of the Witwatersrand, in partial fulfilment of the requirements for the degree
of Master of Management in Entrepreneurship and New Venture Creation*

Supervisor

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30 October 2023

DECLARATION

I, Kelly Grace Alcock, declare that this research report is my own work except as indicated in the references and acknowledgements. It is submitted in partial fulfilment of the requirements for the Master of Management in the Field of Entrepreneurship and New Venture Creation at the University of the Witwatersrand, Johannesburg. It has not been submitted for any degree or examination in this or any other university.

Kelly Grace Alcock

A handwritten signature in black ink, appearing to read 'KGA', with a stylized flourish at the end.

Signed at Cape Town, South Africa

30 October 2023

ABSTRACT

Women entrepreneurs are said to contribute to economic growth and the well-being of societies. The research problem is derived by the pre-historic socio-economic challenges such as a lack of education, financial well-being and socio-cultural aspects which women face in South Africa. These challenges directly impact women entrepreneurs and entrepreneurial activity. The research aims to provide the renewable energy sector with propositions regarding enterprise development and how it can stimulate an entrepreneurial ecosystem. Systemic Entrepreneurship can break the barrier of economic inequality experienced by women in South Africa, especially as they contribute toward the in the informal sector.

The purpose is to understand the women entrepreneurship within the REIPPPP and the committed 0,2-0,7% revenue investment to enterprise development. The study aims to review and determine which regulatory frameworks support an entrepreneurial environment to support women entrepreneurs.

The study underpins resource-based theory to maintain a competitive advantage and interprets access to human capital, social capital and financial capital by women entrepreneurs. A qualitative research design is applied using semi-structured interview guideline to collect data from industry economic development professionals and women entrepreneurs operating in the renewable energy sector in South Africa. Thematic analysis is the data analysis method used and identifies 21 themes.

The findings suggest a positive relationship exists between incentivised procurement and social enterprises in the informal sector and achieving an advantage through collective identity. Similarly, a positive relationship exists between enterprise development and women's entrepreneurship through human capital, social capital and financial capital; community-based development agencies and business sustainability; asset-based community development (ABCD) and entrepreneurship ecosystems; BBBEE and policy and women's empowerment through entrepreneurship. However, criteria are limited due to a lack of transparency, monitoring, evaluation, and a positive relationship between policy, women empowerment, and gender equality.

Further research exploring gender equality in women's entrepreneurship could support implementing agents in enterprise development and deeper localised perspectives to encourage participation and impactful programme design.

Keywords: Women Entrepreneurship, Enterprise Development, Renewable Energy Independent Power Producer Procurement Programme, Women's Economic Empowerment, Gender Equality.

DEDICATION

"Call unto me, and I will answer you, and show you great and mighty things, of which you could not imagine" – Jeremiah 33:3

To the little girl who entered my life, whom God constantly uses to stir up a fire in me to become the greatest! To my beautiful daughter Noa Jane whom I love more than life itself, this research I dedicate to you. You have empowered me to strive for the utmost best and empower other women across the country to break barriers, enter gender-biased terrain and take up space, ensuring that we hold the powers that be to account. When you were born, I was uncertain of the road ahead as a single mother, yet God has done the unthinkable! I thank God for loving me so much that he chose and blessed me with you. You are my biggest inspiration! Watching you grow motivates me and gives me strength and unstoppable power.

Thank you for allowing me to experience the fullness of what a mother can do for her children, society, and the world.

Every day I will acknowledge the might of what God has done and what he is still to do. My life mission remains empowering, mentoring, inspiring, and making you proud.

The best is yet to come; this is our beginning!

I love you,

Mama, XOXO

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LIST OF ACRONYMS AND ABBREVIATIONS

BBBEE	Black Broad-Based Empowerment (BBBEE)
DMRE	Department of Mineral Resources and Energy
DBSA	Development Bank of South Africa (DBSA)
ED	Economic Development
EnD	Enterprise Development
EMEs	Exempted Micro-Enterprises
EPC	Engineering Procurement Construction
EDSD	Enterprise Development and Supplier Development
GDP	Gross Domestic Product
IA	Implementation Agreement
IDC	Industrial Development Corporation of South Africa
IPP	Independent Power Producer
MRP	Mainstream Renewable Power
MW	Megawatt
NDP	National Development Plan
NGO	Non-Governmental Organisation
PD	Project Development
PPA	Power Purchase Agreements
PV	Photovoltaic
QSEs	Qualifying Small Enterprises
RE	Renewable Energy

REIPPPP	Renewable Energy Independent Power Producer Procurement Programme
SAPVIA	South African Photovoltaic Association
SAWEA	South African Wind Energy Association
SDG	Sustainable Development Goal
SED	Socio-Economic Development
SMME	Small & Medium Enterprise
WEE	Women's Economic Empowerment
WOB	Women-owned business

CHAPTER 1: INTRODUCTION

1.1 Introduction

The Renewable Independent Power Producer Programme was developed by the South African government to procure and secure a more sustainable energy mix, moving away from the country's reliance on fossil fuels towards more sustainable power. The programme is recognised as one of the most aggressive programmes to have secured over \$200 million in foreign investment.

Enterprise Development and Socio-Economic development (EnD and SED) contributes to a small portion of the bidding criteria. Economic development (ED) in the South African context is extremely important given the youth unemployment crisis and gender inequities which exist in South Africa. Women play a critical role in developing the generation that will form a great part of implementing its "just transition". Entrepreneurial activity by women is seen to be "casual observations" also further defined as social productive to activity that is limited to informal and infrequent market transactions, are less labour intensive, relies on informal relations and do not accumulate meaningful capital (Venter & Urban, 2019).

This chapter further explains the context of the study; it introduces the research problem, the research objectives and design for defining enterprise development propositions for women entrepreneurs in the renewable energy sector. The contribution of this study seeks to understanding resource-based theory, its importance of enterprise development and how its factors can support women entrepreneurship in renewable energy in South Africa as well as contribute to sustainable development goal 5, gender equality.

Data collection relies on semi-structured interviews by industry experts, entrepreneurs and decision-makers on thematic areas related to enterprise development in the REIPPPP. These discussions assessed current initiatives and programmes designed to develop and support Women entrepreneurs in contributing to the economy and providing opportunities for women-owned businesses.

1.2 Problem Statement

Women across the world still face significant barriers in achieving their potential, even much more in the developing world. Many countries are slowly realising the contributions that women can add to economic growth (Radović-Marković, 2013). Globally women represent over one third of all entrepreneurial activity (Minniti et al., Radović-Marković, 2013); it is noticeable that women have contributed to entrepreneurship expanding, especially in sectors where women were never present (Radović-Marković, 2013).

Gender equality is a term 'not new' in South Africa, as many South African women still bear the brunt of economic inequality. According to Statistics SA (2021), South African women continue to face disparities in equal pay and opportunities, including access to resources for advancement (United Nations Global Compact et al., 2019). South Africa's unemployment rate stands nationally at 34,5% (STATSSA, 2022), and as reflected in the third quarter of 2021, the rate of unemployed women stands at 37,3% (Mail & Guardian, 2022). Across the globe, women still need to be equal in developing countries and many social contexts. Women face extreme societal challenges in a country where male presence outweighs those of women and directly impacts spaces for women in the entrepreneurial context (Moyo & Dhliwayo, 2019; Urban & Msimango-Galawe, 2020). Women feel less empowered to enter male-dominated markets due to the high rate of discrimination and gender-based violence across the country (GEM, 2018).

"Economic inequality is the persistence of a wide dispersion in economic outcomes over time among individuals in an economy" (Bruton et al., 2021, p. 2). Many studies support that entrepreneurship can reduce economic inequality through a focus shift on the informal sector and the inclusivity of institutions. However, women entrepreneurs doing business in the informal sector, as categorised within rural IPP communities, need access to the formal market as supported institutions. They are limited in their business transactions due to costs and opportunism by other formal businesses. They are also faced with policies created for formal sector businesses, whereas informal businesses depend on informal arrangements and understandings (Bruton et al., 2021). It is critical to economic growth that the government and the private sector strategically incubate women-owned businesses through inclusive ecosystems and entrepreneurial skills to change the current narrative.

Very little research explains women's lived experiences as entrepreneurs in informal South Africa as it relates to the geography of this study. It is within the context of enterprise development that incubation programmes will provide resources such as human capital to develop businesses, frame business solutions, business strategy, and business skills and provide access to markets and access to networks in order to create and maintain businesses which are sustainable (McAdam et al., 2019). The study reviews existing entrepreneurial structures such as enterprise development programmes in contributing to women entrepreneurs' development. The personal stories of women entrepreneurs and enterprise development professionals working in renewable energy communities across the country will provide further insight into enterprise development as it exists within economic development within the REIPPPP in South Africa.

Limited academic literature is available in this domain and therefore the purpose of the study can also contribute to academic literature on the topic.

1.3 Aims of the study and research questions.

The purpose of this narrative study is to develop propositions for renewable energy sector in fostering a greater entrepreneurial ecosystem for women in the renewable energy sector; as well as to understand the experience of women entrepreneurs and enterprise development professionals in the REIPPPP.

This research study involved collecting views from women entrepreneurs and enterprise development professionals on four thematic areas: women entrepreneurship in the informal sector in South Africa, women entrepreneurship and enterprise development, enterprise development criteria in the REIPPPP and the regulatory environment for enterprise development in the REIPPPP. In collecting these views, the researcher sought to understand the current status quo and the underlying challenges facing women in the sector and interpret the government regulation in this domain as well as to determine market access and inclusivity for women in the renewable energy in the understanding the committed 0,2-0,7% revenue investment to enterprise development. The study aims to adapt a resourced-based theoretical approach as necessary for women in entrepreneurship to gain a competitive advantage.

1.3.1 Key aims of the research.

1. Understand how the REIPPPs EnD criteria contribute to women's entrepreneurship?
2. To gain insight into how entrepreneurial programmes such as incubation and acceleration nurture women in entrepreneurship.
3. To investigate what REIPPPP EnD regulatory frameworks support enterprise development for women in entrepreneurship?
4. To explore REIPPPP's response to SD5 Gender equality in terms of the advancement of women in entrepreneurship

1.3.2 Research Questions

1. To what extent is the REIPPPs EnD criteria contribute to women's entrepreneurship?
2. To what extent can entrepreneurial programmes such as incubation and acceleration nurture women in entrepreneurship?
3. To what extent do REIPPPP EnD regulatory frameworks support enterprise development for women in entrepreneurship?
4. To what extent does REIPPPP respond to SD5 Gender equality in terms of the advancement of women in entrepreneurship?

1.4 Research Context

The South African Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) is a competitive tender process that was designed to facilitate private sector investment into grid-connected renewable energy (RE) generation in South Africa (Eberhard et al. 2016; Mgxashe, 2021). To date there has been 5 rounds of the REIPPPP, during the first four rounds of bidding a total of 6328MW have been procured from renewable energy technology such as wind turbines, solar photovoltaic (PV), concentrated solar power (CSP) and smaller projects who bid in the small IPP such as hydro, landfill gas, biogas and biomass totalling R193 billion in foreign investment (Mgxashe, 2021). The fifth round saw preferred bidders for 975 (MW) of solar PV and

1605 (MW) of Wind power (IPPO,2021). There are 81 operational Independent Power Producers (IPPs) in the country at present (Greencape, 2022).

Enterprise development in the REIPPPP is the directing funds for entrepreneurial capacity and business expertise to beneficiaries in communities in a 50km radius totalling 5% of the Enterprise Development (ED) assessment (Eberhard & Naude, 2016:118). “Bidders are to identify enterprises that will receive contributions as well as to disclose if they are Exempted Micro-Enterprises (EMEs) or Qualifying Small Enterprises (QSEs), to what extent these businesses are owned by black women and the ownership by black individuals” (Eberhard & Naude, 2016:118).

Women entrepreneurs are said to contribute not only to the economic growth but the growth and well-being of societies (Kelley et al., 2017; World Bank, 2018; Urban & Msimango-Galawe, 2020). The total entrepreneurial activity (TEA) for women in Sub-Saharan Africa is 21,8%, and entrepreneurial intention at 37,8% (GEM, 2018). The percentage of women who choose an entrepreneurial career path is however much lower than that of men (Cardella et al., 2020). Stimulating women in entrepreneurship is a critical benefit to achieving women owned businesses which are sustainable, adding to economic growth and meeting national developmental targets. Cardell et al. (2020) states that the fast-growing category of entrepreneurship is that of women and that can be seen in job creation and increasing GDPs.

Undoubtedly, women create unseen value for their communities directly and indirectly. Reports show that women-owned businesses employ more people than businesses owned by men. However, there is a significant gap where expectations of high growth could be higher than those of men. The networks formed between women have responded to policies such as gender capital, where the advantage is associated with femininity (McAdam et al., 2019). In gender entrepreneurship authors have noted the influence and impact of economic and social contexts as it relates to entrepreneurial ventures and success by women (Radović-Marković, 2013).

Government policy is meant to advance economic transformation in South Africa and is aimed at promoting the participation of previously disadvantaged individuals in South Africa (Venter & Urban, 2019). “Enterprise Development (ED) and Supplier

Development (SD) are one of three priority elements of the Broad-Based Black Economic Empowerment (B-BEEE) Scorecard” (BBB-EE Commission, 2021). The REIPPPP and ED scorecard is used to establish the combined contribution to enterprise development for the duration that the IPP is in operation; this is done by “using a percentage of revenue as an adjusted percentage for local enterprises” (Eberhard &Naude, 2017).

According to Urban & Msimango-Galawe (2020) ‘development support agencies should encourage more female entrepreneurs through evidence-based programmes which will enable greater levels of entrepreneurial alertness and provide a range of institutional mechanisms that support women entrepreneurs. Therefore, purposefully this report seeks to determine the commitment to responsive gender mainstreaming through the lens of the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) in South Africa focusing on enterprise development for women entrepreneurs. The theory that underpins this research study is enterprise development theory prioritising resource-based theory and subthemes of financial capital, social capital and human capital.

This narrative study will bring together industry experts, entrepreneurs and decision makers on thematic areas related to enterprise development of the REIPPPP to discuss current initiatives and programmes specifically designed for developing and supporting women entrepreneurs in contribution to the economy and as well as providing opportunities for women owned businesses.

The study aims to propose that a resourced based theoretical approach is necessary for women in entrepreneurship to gain a competitive advantage through enterprise development programmes supported by the REIPPPP through incubation, inclusivity institutions that are responsive and can encourage entrepreneurship by women and promote women's economic empowerment as well as enterprise growth is dependent on entrepreneurial alertness and opportunity exploitation by women entrepreneurs and finally that South Africa can be responsive to Sustainable Development Goal 5- Gender Equality through the REIPPPP.

1.5 Contribution of the study

Enterprise development is necessary to support micro-enterprises to reach sustainability. The history of enterprise development in South Africa has seen many businesses scale exponentially given the resources such as human capital required to meet the needs of supplying the services of that business, social capital and financial startup capital to support the foundation phase of the start-up enterprise. The enterprise development component of the REIPPPP is still in its infancy with no regulation to support the development of businesses, which includes criteria. This research contributes to the development of literature on women entrepreneurship in the renewable energy sector with a focus on enterprise development. The research can be used to inform the necessary decisions needed for ecosystem development for women entrepreneurs in the REIPPPP and support the development of enterprise development frameworks to regulate and stimulate women entrepreneurs in the sector (GEM, 2019). The study seeks to provide four key propositions for the renewable energy sector to consider in expanding women's participation in the sector through entrepreneurship, one is

1.6 Structure of the research report

Chapter one introduces the study, providing background contextual insight into the research problem, followed by research aims and research questions to be explored in this study. The contribution of this research is outlined in this chapter.

Chapter two we explore the literature that has been used on studies that have been used on this topic in the past. The terms that are defined in the first chapter will be further explained in this chapter. The literature review provided in chapter 2 supports the notion that if women entrepreneurs are stimulated, the economy stands to benefit through economic growth and will be able to address meeting the national development targets. This chapter introduces the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) and its socio-economic and enterprise development requirements. The study relies on a resource-based theory, a strategic approach that will enable sustainability for a competitive advantage.

Chapter three introduces the research methodology, namely the research philosophy and design used to conduct the study. This includes the introduction to the population and sample, the participants biographical information and data collection methods. Thematic analysis as the data analysis tool is described in this chapter.

Chapter four is an interpretation of the findings; the researcher introduces the voices of the participants and themes start emerging. The narratives are formed and discussed in the next chapter.

Chapter five the researcher discusses the research findings across the themes and categories and identifying the relationships between the themes as well as forming propositions.

Chapter six concludes the research study and provides recommendations for consideration by the renewable energy sector in its enterprise development model. These propositions can be used to facilitate women entrepreneurship ecosystem building and the development of an enterprise development framework within the REIPPP.

1.7 Definition of Terms

Enterprise Development

According to Jongunola (2013), ED is a deed of time and capital investment in aiding people to establish, expand or improve small businesses.

ED Initiatives

These initiatives come in the form of monetary or non-monetary contributions, transferred to the beneficiaries with the vital intention of developing and sustaining their finances, efficiency in terms of operations and independence (Kloppers, 2014; Mahmoud, Owusu-Frimpong & Nwanko, 2016)

Gender Equality

"When inequalities against women are addressed and policies reshaped so that women and girls could become catalytic agents of change and equal partners with men in the

quest to promote growth that is inclusive, just, equitable, and sustainable" (UNDP, 2014; Moyo, 2019)

Gender Gap

"Women are under-represented among the population of entrepreneurs, as they tend to operate smaller and less dynamic than men and are more likely to operate in non-capital-intensive sectors, including personal services, which often have a lower potential for generating a high and sustainable income" (OCED, 2016)

IPPs

"A company or consortium established by a range of shareholders to bid for, construct and operate an independent power plant consists of black industrials, other South African shareholders, community trusts and foreign shareholders. IPPs commit to achieving socio-economic targets such as job creation, economic development as it relates to enterprise development and preferential procurement and socio-economic upliftment" (DOE, 2014; WWF, 2014)

Renewable Energy Independent Power Producer Procurement Programme

"The South African Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) is a competitive tender process designed to facilitate private sector investment into grid-connected renewable energy (RE) generation in South Africa. (Eberhard et al. 2014)

Socio-Economic Development (SED) beneficiary

The amended Codes of Good Practice for Broad-Based Black Economic Empowerment of the DTI refers to socio-economic development contributions as "monetary and non-monetary contributions implemented for the benefit of Black natural persons; communities and groups of natural persons where at least 75% of the beneficiaries are Black people (Mgxashe, 2021). The contribution is to benefit and promote sustainable access for the beneficiaries to the economy through income generating activities." (Mgxashe, 2021; DTI, 2018)

Sustainable Development Goal 5

This SDG speaks to achieving gender equality and empowering women and girls. Purposefully it urges countries to achieve gender equality and empower women and girls in areas where girls may feel disempowered (Moyo & Dhliwayo, 2019).

Women's Economic Empowerment

"Economic empowerment is the capacity of women and men to participate in, contribute to and benefit from growth processes in ways which recognise the value of their contributions, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth" (GENDERNET, 2011). "Economic empowerment increases women's access to economic resources and opportunities including jobs, financial services, property and other productive assets, skills development and market information" (GENDERNET, 2011). "Women's economic participation and empowerment are fundamental to strengthening women's rights and enabling women to have control over their lives and exert influence in society" (GENDERNET, 2011).

1.8 Research Assumptions

This research is under-researched, and the study relies on the data from thematic analysis to provide evidence-based narratives from the data. The researcher assumes that the non-probability participants will be willing to discuss entrepreneurship and enterprise development programmes for women entrepreneurs. The researcher assumes that access to informal beneficiaries' information about REIPPPP will be transparent in communication. There is minimal research report, and the researcher will depend on the same questionnaire for economic development professionals and women entrepreneurs.

1.9 Delimitations of the study

Due to the socio-political contexts associated with women's participation in the economy the researcher prioritises women's entrepreneurship as a phenomenon. The scope of this study is focused on women's entrepreneurship and not the broader context of entrepreneurship. The scope is designed to provide meaningful insights into the ecosystem of women entrepreneurs in the renewable energy sector in South Africa.

Women owned businesses participating in the study were selected non-probably, relying on access to information through social networks such as established sectoral networks for women in the RE industry. Focusing on informal women entrepreneurs could potentially act as a limitation to the study thus, the researcher will include women entrepreneurs operating within the renewable energy sector in the formal economy to provide both perspectives.

The research questions and objectives are based on four elements, criteria, enterprise development programmes, policy and gender. These elements are critical for women entrepreneurs to gain a competitive advantage and to contribute to new research in this area. Subsequently, demographical questions are asked to provide context to women entrepreneurs' age, education and ethnicity.

1.10 Conclusion

This chapter provides an overview of the research study, which includes defining the research problem, argument and data collection method. The chapter contextualises the literature that will be discussed in the next chapter. The research theory is introduced as well as how it will be interpreted and support the propositions.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter introduces the body of literature used to present the current status quo as it relates to women entrepreneurship and enterprise development in the renewable energy sector in South Africa. The literature provides a comprehensive story of the level of prioritisation and access for women entrepreneurs in the sector and builds an argument on the benefits of stimulating women owned businesses through enterprise development. The literature investigates resourced based theories as critical for ensuring enterprise growth to achieving a competitive advantage. It then further proves the weaknesses within the REIPPPs socio-economic development initiatives and the limitations in the current literature.

2.2 Background on Women Entrepreneurship and REIPPPP

South Africa's historical economic inequality continues to divide men and women. This is seen by access to resources for economic upliftment. Formal businesses have better access to resources than those in informal sectors, where most women's businesses can be found (Bruton et al., 2021). However, Bruton (2021) clearly distinguishes between the formal and informal sectors; at a cost, businesses in the informal sector need access to the required resources.

The renewable energy sector developed progressively since 2010, with economic development being a core bidding requirement, of which enterprise development forms part of "The Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) was designed as a blueprint for development in alignment with the National Development Plan (Mgxashe, 2021). It is a tender process competitively designed to facilitate private sector investment into renewable energy (RE) generation for connection into the national grid" (Eberhard &Naude, 2017, p. 3). Relying on the United Nations Sustainable Development Goals, the National Development Plan, the socio-economic development component and the contributions to enterprise development is a requirement to direct funds for entrepreneurial capacity and business expertise. This leaves an

enormous opportunity for entrepreneurial activity by women owned businesses, with the requirement that beneficiaries of enterprise development are communities that reside within a 50km radius and extend to the municipal boundaries of an IPP. Enterprise development accounts for 5% of the ED assessment, which is considered a small margin of financial commitment (Eberhard & Naude, 2017; Davies et al., 2018; Mgxashe, 2021).

Some of the obstacles which women face include higher domestic responsibility, lower levels of education, and a lack of female role models, which leaves them with fewer business networks, a lack of opportunity for procuring capital and lower status in society (Urban & Msimango-Galawe, 2020) "Women are said to be underrepresented among the population of entrepreneurs" (OCED, 2016, p. 3; McAdam et al., 2019). They are known to operate on a smaller scale. Their businesses are said to be less dynamic than men, especially the low percentage of women who operate in capital-intensive sectors. Many of these businesses are following; crafts, hawking, personal services, hospitality and tourism sectors (Urban & Msimango-Galawe, 2020). There is no evidential literature on a formalised framework for enterprise development in the renewable energy sector in support of diversity, equity and inclusion, for the purpose of this research would seem beneficial for women entrepreneurs. Stimulating women in entrepreneurship is critical to achieving economic equality. Sustained women-owned businesses can contribute to economic growth, meeting national developmental targets. Moreover, it is possible through leveraging resources women entrepreneurs can use to achieve competitive advantage and tackle global challenges.

2.3 Overview of enterprise development theories

The research paper explores relevant entrepreneurship theories for the purpose of this study. These theories provide the evidence of the entrepreneurial character and enterprise development requirements needed by entrepreneurs to succeed. These theories from the basis of proving that a holistic approach to enterprise development could provide women entrepreneurs with greater alertness, opportunity recognition and competitive advantage (Urban & Msimango-Galawe, 2020). Furthermore, encouraging entrepreneurship in the informal sector can reduce inequality (Bruton et al., 2021).

2.3.1 Enterprise Growthiness

Enterprise 'growthiness' considers two aspects, an enterprise's survival ability and sustainable development ability (Mao, 2009). Survival ability is highly dependent on new technology, new product and originality when the enterprise was founded, which gives that enterprise a broader rank in terms of competitive advantage. On the other hand, sustainable development is the survival ability after the generation period; the enterprise survives in the market and can overcome 'favourable' circumstances and adversity; even then, the enterprise continues to develop and grow (Mao, 2009). Enterprise growthiness is essential for the sustainability of women-owned enterprises considering the multilayers discussed and amplifying the support that women-owned enterprises require to own sustainable businesses that will grow and exist over long periods.

Sustainability for women-owned businesses is essential for the impact it will have on society for decades; therefore, enterprise growth is vital. If we unpack this theory, it is the value-added ability the enterprise obtains through optimising the 'change speed' between the production factor and product result in the development process. Enterprise growthiness is an enterprise's practical ability and growth potential. Even though the measurement depends on growth speed, it should also be measured systematically and comprehensively regarding efficiency and competition (Mao, 2009, p. 21).

2.3.2 Resource-Based Entrepreneurship Theory

The resource-based theory is strategic as it enables sustainability for a competitive advantage. The theory argues that access to resources can predict the success of a new venture (Alvarez & Busenitz, 2011). It places the emphasis on the importance on access to financial, human and social capital – as it enhances the ability to recognise opportunities and exploit them. In determining the disparities that women entrepreneurs face, resource-based theory becomes important to understand in terms of having adequate and critical resources which are integral to women owned businesses having a competitive advantage in the market. It also supports the recognition of the needed resources within the organisation to produce heterogeneous outputs that are a value add to the market (Goh & Loosemore, 2017). These resources refer to financial, physical, technological, organisational, human, and intellectual and social. Having resources is

essential for entrepreneurship and is acknowledged as part of the resource-based framework (Goh & Loosemore, 2017).

2.3.2.1 Financial Capital Theory

Research proves that new ventures are created when there is access to *financial capital* and would suggest that business owners with access to finance can acquire resources and exploit opportunities (Clausen, 2006; Simpeh, 2011). Two methods of financing a new venture are their own or other people's money (Venter & Urban, 2019). About other people's money, this study will highlight enterprise development as an alternative to gaining finance through alternatives to formal banking. However, other researchers argue that financial capital has very little influence on whether a venture will succeed or not (Hurst & Lusardi, 2004, Simpeh, 2011). Clausen (2006) clarifies that financial capital can predict new venture growth but is not essential to start a new business venture (Simpeh, 2011).

2.3.2.2 Human Capital Theory

Human capital encompasses two factors, namely, education and experience, as the knowledge through these factors is heterogeneously distributed in understanding the difference between opportunity recognition and exploitation (Simpeh, 2011). Having adequate knowledge provides an individual with cognitive abilities, which affects overall productivity and efficiency (Venter & Urban, 2019). Experienced and educated individuals who are seniors can identify opportunities. Investment in human capital could determine changes in attitudes toward entrepreneurial activities (Venter & Urban, 2019).

There are many survivalist entrepreneurs in South Africa as human capital investment is low.

and inconsistent; these people have minimal choices and are unemployed. Their only option is self-sufficiency (Venter & Urban, 2019). Rob Davies, previous Minister of Trade and Industry stated that five out of every 7 start-ups fail and that it had very little to do with structural problems within the economy and could be poor entrepreneurial skills (Venter & Urban, 2019).

In the case of rural communities in South Africa, many of the solutions and innovations are socially complex. In terms of consistency of these enterprises, many decisions cannot be transferred to those who 'want to be' an entrepreneur but need more entrepreneurial intent and opportunity for heterogeneity to maintain the competitive advantage (Alvarez & Busenitz, 2011).

2.3.2.3 Social Capital Theory

Social Capital theory is "the relationships and networks from which an individual can derive institutional support and entails the actual and potential resources through an actor's network of relationships" (Venter & Urban, 2019, p. 99). Social capital can connect entrepreneurs to opportunities and could assist an entrepreneur with troubleshooting and problem-solving (Simpeh, 2011). "Social ties could provide and facilitate resource acquisitions as well as enhance possibilities of opportunity exploitation" (Simpeh, 2011, p. 5). Ngoasong & Kimbu (2019) suggest that even though women-owned businesses in developing countries are more diminutive in business size, they start with a lower foundation and can do this despite socio-economic and institutional constraints. They operate through "embeddedness", the "coexistence and interaction of entrepreneurs with other actors within a community or country"; access resources and claim to be legitimate" (Ngoasong & Kimbu, 2019, p. 41).

2.3.3 Psychological Entrepreneurship Theory

This theory pertains to characteristics of a personal nature that define entrepreneurship, traits such as the locus of control and the need for achievement is seen as evidence attributed to three other characteristics associated entrepreneurial inclination, which are risk-taking, innovativeness and tolerance for ambiguity (Simpeh, 2011:2)

2.3.3.1 Personality Traits theory

This theory argues that the behavior and characteristics of an entrepreneur is to be opportunity driven and to possess a high level of creativity and innovation including good business acumen. Entrepreneurs are seen to be optimistic individuals who show resilience emotionally and great mental stability. They show an immense amount of commitment and persevere no matter the outcome. Entrepreneurs thrive when they win and challenge the status quo with the desire to be transformational. *Locus of control* is considered an

aspect of the entrepreneur's personality, this the perception that the outcome is purely based on the actions or the circumstances outside of their control. The need for achievement is explained by McClelland (1996) that it is human nature to "succeed, accomplish, excel or achieve" (Simpeh, 2011:3). Sociological Entrepreneurship Theory

2.3.4 Opportunity- Based Entrepreneurship Theory

This theory claims that entrepreneurs do not "cause change" which is described by Schumpeter but "exploit" opportunities that cause change (Drucker, 1985; Simpeh, 2011:4). Drucker further explains that an entrepreneur will always search for change, responds to it and exploits that as an opportunity, he claims that entrepreneurs have an eye for possibilities initiated by changeover problems (Simpeh, 2011). He argues irrespective of resources entrepreneurship is the "pursuit of opportunity" (Simpeh, 2011:4)

2.4 Women Entrepreneurship and Enterprise Development in South Africa

2.4.1 The status quo on women entrepreneurship

As psychological entrepreneurship theory suggests, women is said to be motivated by various factors and is evident in the intention behind their businesses. It differs from that of men, as some women are more likely to be self-employed to have a work-life balance. There are many challenges that women face, such as social and cultural discrimination, their lack of entrepreneurial skills, their battle to find finance, and they have low social capital and policies that support women entrepreneurs, which discourages women from choosing entrepreneurship as a career path (OCED, 2016). They have lower confidence levels in their capability to start a business than men, as 43.4 % of women and 55.6% of men believe they have what it takes to start a business (GEM, 2018). In Sub-Saharan Africa, 66.5% of women are not deterred by the fear of failure. Little research provides insight into "individual level alertness and contextual institutional factors" (Urban & Msimango-Galawe, 2020). The institutional theory could be relied on to understand the contextual factors that affect women-owned businesses and the factors that could

influence the institutional dimensions such as regulatory, cognitive and conducive institutional environments (Urban & Msimango-Galawe, 2020).

2.4.2 Women Entrepreneurship and Enterprise Development

Enterprise growth is complex and has an adjustment process different from a simple scale extension. It requires the interior and exterior relations to be balanced. Therefore, Mao (2009) describes it as a development process recognising enterprise growth over a long period. It is not a stable process. It comes with challenges and is a unification of quantity and quality. Access to financial resources is one of the biggest challenges for small businesses. Microfinance can provide much-needed funding for informal businesses and financial contributions under the Black Economic Empowerment scorecard's Enterprise Development and Supplier Development component (Venter & Urban, 2019, p. 297).

Such as suggested by (Schumpeter, 1934; Kirzner, 1985; Shane, 2003; Brush, 2009) market access, access to capital and human capital are the foundational blocks to ensure that a business venture is viable an enterprise growthiness theory (reference). However, for women entrepreneurship (Brush et al., 2009) argues that norms, values and expectations are at the center of understanding entrepreneurship by women (Elam, 2008; Brush, 2009). The 5M framework adds two further elements “motherhood as well as the meso and microenvironment” (Brush et al., 2009)

The role of networks has shown to be a policy response to inclusivity in entrepreneurial ecosystems (McAdam et al., 2019). Inclusive entrepreneurial ecosystems require four domains, "fluidity, population flux, labour market change and firm growth" (McAdam et al., 2019). In all four of these domains, women are underrepresented concerning entrepreneurial activity. McAdam et al. (2019) also state that women are leaving male-dominated spaces due to gender biases, hostility in the environment, and 'glass-wall/ceiling' effects which reduce their participation and contribution in entrepreneurial activity.

Entrepreneurs in the informal domain need access to market-supportive institutions and rely on informal arrangements through trusted relationships that are critical for entrepreneurial activity (Bruton et al., 2021). Research suggests that economic inequality

affecting women in South Africa can benefit from informal economic inclusion and inclusive institutions (Bruton et al., 2021).

Linked to the National Development Plan 2030 (NDP), its goal is to support small businesses by effectively coordinating relevant agencies, development finance, and public and private incubators. Incubators are integral as a foundation for entrepreneurship education in developing entrepreneurial intent, skills, knowledge and support to explore the viability of entrepreneurship as a career (Venter & Urban, 2019).

2.5 Enterprise Development and REIPPPP

2.5.1 Criteria

As previously described, REIPPPP is a competitive procurement programme that aims to facilitate private sector investment into renewable energy generation in South Africa (Eberhard & Naude, 2017, p. 3). The process requests that applicants called 'bidders' are to submit a request for proposal (RFP). Economic development is 'Part B' of the RFP and Enterprise Development is one of the seven economic development elements (SAWEA & SAPVIA, 2020). The socio-economic development weighting in this tender process carries 30 points, a 70:30 split between price and economic development objectives. The objective behind the ED criteria and requirements is to bolster local job creation, community development, and black commercial interests, thus including growth in upcoming microenterprises for inclusive growth (Eberhard & Naude, 2017, p. 24). The non-priced categories for enterprise development are job creation, local content, ownership, management control, preferential procurement, enterprise, and socio-economic development (Eberhard & Naude, 2017, p. 24). Contributions toward ED in 2021 stands at R7.2 billion over bid window 1- 4 totals in 2021 and "assuming equal distribution" of revenue generated over 20 years; the contribution towards ED is calculated at R360 million annually (IPPO, 2021).

There are 81 operational IPPs in South Africa, and by the end of 2021, R484.1 million has been contributed to ED.

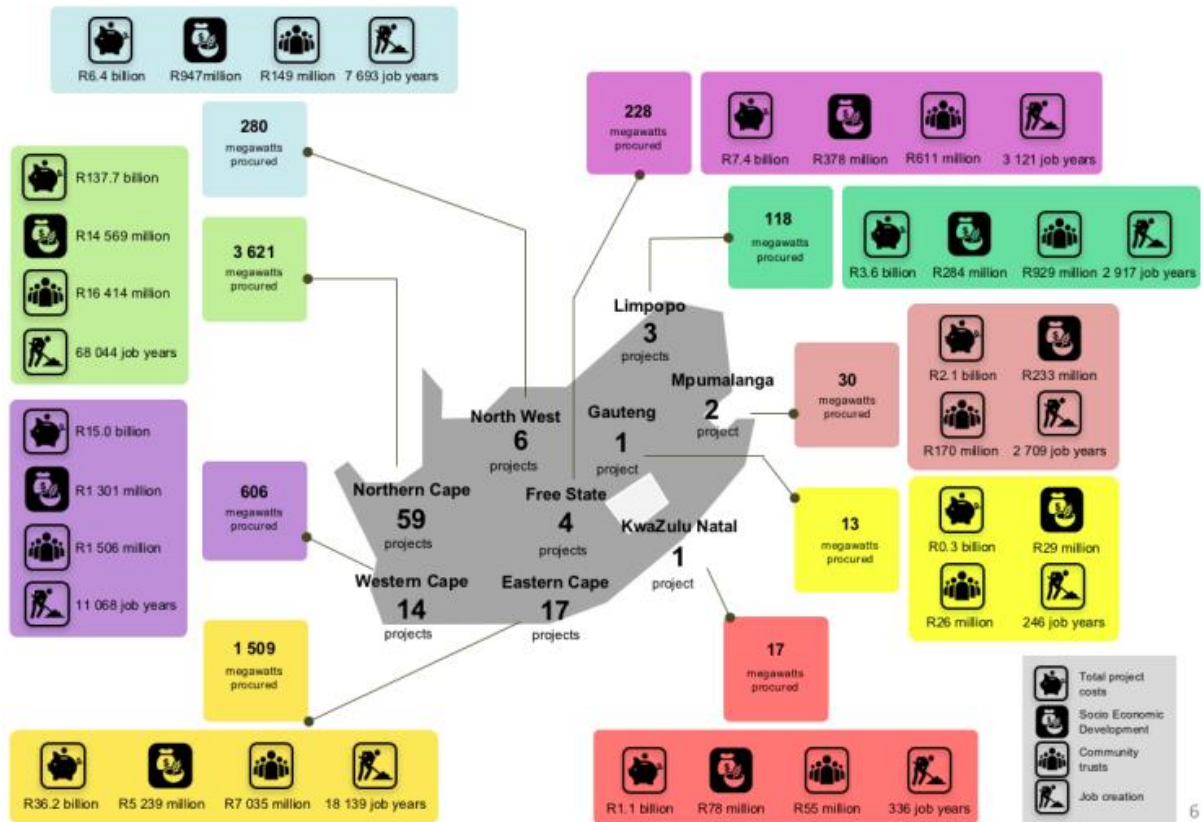


Figure 1: Socio-Economic and Enterprise Development Commitments in SA (2020)

The evaluation criteria of enterprise development solely consider the contributor status level calculated under the BBBEE codes (Van der Poel, 2021). Van der Poel (2021) also states that black women have a minimum South African Entity Participation of 49% and 5% of the shareholding in the project company. Skills development and Enterprise development is a threshold sub-element of the ED bid qualification methodology (IPPO, 2020).

Evidence of ED activities include proof of funds disbursement, identifying documents for fund recipients and evidence of the purpose of funds disbursement (Mgxashe, 2021). In the fourth bid round, R3.4 billion was pledged by competing bidders to ED contributions over the lifespan of the projects; this amounts to four times more than in the beginning looking at the first round of the REIPPPP (Eberhard & Naude, 2017).

2.5.2 Regulatory Environment

Gender mainstreaming in women entrepreneurship in the REIPPPP supports proposition policies that respond to enterprise development for women can further facilitate more entrepreneurial activity by women. Brush et al. (2009, p.8) argues that a framework that is “gender-aware” fosters a holistic approach to women entrepreneurship and this is important for start-up culture and growth. Brush et al. (2009) argues that need for a 5M framework considering the 3M framework by Bates et al. (2007) which argues that market, money and management is required to start and scale businesses. Institutional theory supports that the 3M framework can be reviewed for improvement. Ensuring gender responsive creates a future focused knowledge base for policy around gender and women entrepreneurship.

According to Bruton et al. (2021), inclusive instructions are critical to economic equality, and this is through government policies which can increase opportunities for those operating in the informal sector by lowering the benchmarks between the formal and informal sectors eliminating the chances of corruption. Secondly, social change, such as supportive social norms, is implemented to facilitate entrepreneurship in the informal sector. Social enterprises could also play a vital role in the informal sector and achieve an advantage through collective identity.

The National Development Plan (NDP) aims to eliminate poverty and reduce inequality by 2030, through reliance on the people of South Africa and by growing an inclusive economy, building on capabilities, enhancing the capacity within the state, and promoting leadership and partnership in society (National Planning Commission, 2012). The NDP dramatically emphasises the need for South Africa to engage in a strong network of economic infrastructure which will support the medium and long-term socio-economic objectives (National Planning Commission, 2012).

This plan was created based on a diagnostic report by the National Planning commission in 2011, highlighting nine key challenges that rely heavily on economic equality. Drawing on the nine challenges, 1) very few people work; 2) quality education for black people is poor 3) infrastructure is poorly located, inadequate and not well maintained 4) spatial divides barriers’ inclusive development 5) the economy is resource intensive which is unsustainable 6) the public health system cannot meet the demands 7)

public services are uneven and poor 8) corruption is high and 9) society remains divided. According to the Department of Women (2015), in 2012, 72.4 % of women lived below the upper-bound poverty line, and 67,3% of men and more women tend to live below the poverty line, meaning that they are more vulnerable to poverty and experience poverty on the way deeper level which includes at the household level (Department of Women, 2015).

The socioeconomic and enterprise development criteria of the REIPPPP are purposefully set to align with the country's National Development Plan towards 2030 (Eberhard &Naude, 2017).

2.5.3 Broad-Based Black Economic Empowerment (B-BEEE)

Broad-Based Black Economic Empowerment (B-BEEE) is a policy promulgated by the South African Government developed to tackle historical imbalances and redistribute wealth to South Africans classified as 'previously disadvantaged' (Adendorff et al., 2020). "BBBEE is governed by the Broad-Based Black Economic Empowerment (BBBEE) Act No. 53 of 2003, and the BBB-EE Codes of Good Practice, gazetted in February 2007 and the Amended Codes of 2013" (DTI, 2013; Ndlovu, 2018, p. 9). The BBB-EE codes act as a guidebook to measure ownership, management control, employment, skills development, preferential procurement, enterprise development, socio-economic development and qualifying small enterprises (Adendorff et al., 2020). In the REIPPPP, the ED scorecard is meant to establish and verify the contributions made toward enterprises during operation as a percentage of revenue is adjusted in percentage for local enterprises beneficiaries (Eberhard &Naude, 2017).

Code (400) is crucial as it pertains to ESD and the amended codes on Preferential Procurement under the same code.

	Description	Others	Banks and Life officers	Targets year 1-3	Targets year 3+
		Weightings		Targets	
2.1	Procurement	20	15		
2.1.1	B-BBEE Procurement Spend from all <i>Empowering Suppliers</i> based on the B-BBEE procurement recognition levels as a percentage of total measured procurement spend	5	4	75%	80%
2.1.2	B-BBEE procurement spend from empowering suppliers who are QSEs based on the applicable B-BBEE procurement recognition levels as a percentage of total measured procurement spend	3	2	14%	18%
2.1.3	B-BBEE procurement spend from empowering suppliers who are EMEs based on the applicable B-BBEE procurement recognition levels as a percentage of total measured procurement spend	2	2	8%	12%
2.1.4	B-BBEE procurement spend from empowering suppliers that are at least 51% black owned based on the applicable B-BBEE procurement recognition levels as a percentage of total measured procurement spend	7	5	20%	30%
2.1.5	B-BBEE procurement spend from empowering suppliers that are at least 30% black women owned based on the applicable B-BBEE procurement recognition levels as a percentage of total measured procurement spend	3	2	9%	10%
2.2	Supplier Development	10	0		

2.2.1	Annual value of all supplier development contributions made by the measured entity	10	0	2% of NPAT
2.3	Enterprise and Supplier Development	5	0	
2.3.1	Annual value of enterprise development contributions and sector specific programmes made by the measured entity	5	0	1% of NPAT
	Total	35	15	
2.4	Bonus Points			
2.4.1	Graduation of one or more enterprise development beneficiaries to graduate to the supplier development level.	1	0	1
2.4.2	For creating one or more jobs directly as a result of supplier development and enterprise development initiatives by the measured entity.	1	0	1
2.4.3 (a)	B-BBEE procurement spend from intermediated black professional service providers who are empowering suppliers based on the B-BBEE procurement recognition levels as a percentage of intermediated spend	2	2	5%
<i>Or</i>				
2.4.3 (b)	B-BBEE procurement spend from black stockbrokers or black fund managers who are empowering suppliers based on the B-BBEE procurement recognition levels as a percentage of total value of all trade allocated	2	2	5%
2.4.4	B-BBEE procurement spend from designated group suppliers that are at least 51% black owned as a percentage of the total measured spend	2	2	2%
2.4.5	Enterprise development support of black stockbrokers, black fund managers or intermediaries	2	0	0.5% of NPAT (recoverable or non-recoverable)
	Total bonus points	8	4	

Table 1: Procurement Enterprise and Supplier Development Scorecard (DTI, 2018)

According to Adendorff et al. (2020), a positive relationship exists between the importance of BBBEE and policy and women's empowerment which has been successful. Women's economic empowerment is when women's capacity is enhanced to make choices and convert those choices into actions and outcomes (World Bank, 2007; Adendorff et al., 2020). In the RE sector, institutional reform is required regarding access to information, inclusion, participation, accountability and local organisational capacity (Adendorff et al., 2020, p. 39).

2.6 Gender Equality and REIPPPP

To ensure women's rights, strengthened policies are needed as gender disparities remain economically and politically. On average, women still earn 24% less than men in the global labour market. The SDGs are targeted to recognise these disparities. South Africa is among those countries that have committed to these targets (UN Women, 2015).

2.6.1 Gender inequalities

According to Cardella et al. (2020) Stroller describes the term gender based on biological and physical features that determines behavior of that individual. With, men's behavior is characterised as masculine and women, feminine. This is argued through social role theory, whereby stereotypes shape the acceptance of an individual socially. The renewable energy sector in South Africa is male dominated, and with South Africa's historical socio-cultural aspect "male-centered vision" can deter women from participating in entrepreneurial activity. This notion is a system challenge in South Africa. This view is supported by Sullivan and Meek (2012) who argue that societal socialisation processes between that of men and women can create barriers for unequal distribution of resources Cardella et al. (2020, p.2)

2.6.2 United Nations Sustainable Development Goal 5: Gender Equality and Empowerment

"Gender disparities retard the political, economic, social and cultural advancement of women in society" (Moyo & Dhliwayo, 2019, p. 257). "Together, the United Nations (UN), Economic Commission for Africa (UNECA), the African Union (AU), African Development Bank (AfDB) and United Nations Development Programme (UNDP) strongly place a great emphasis on gender inequality by calling it the archetypal inequality trap, that it reproduces into more inequality which in turn has a negative developmental consequence" (Moyo & Dhliwayo, 2019, p. 257). The UNDP suggests that the reshaping of policy can and will allow women and girls to become catalysts for change and be equal to men, with the primary objective of promoting inclusive, equitable and sustainable growth. Therefore, the acceleration of gender equality and women's empowerment are recognised as critical to achieving the SDGs in Sub-Saharan Africa, and this is possible

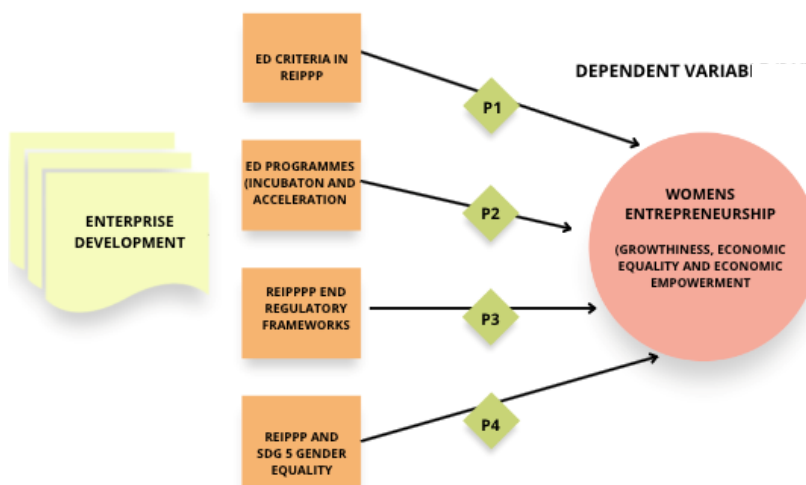
through the generation of sustained, inclusive growth, job creation, poverty alleviation and reducing costs of achieving the other SDGs (Moyo & Dhliwayo, 2019, p. 257). (Mwiti & Goulding, 2018)

SGD 5 seeks to empower women and girls to have equal rights and access to economic resources, ownership and control of land, financial resources and other resources. In addition, women and girls should have access to resources such as technology and skills development opportunities (Moyo & Dhliwayo, 2019).

2.7 Conceptual Framework

A conceptual framework outlines the focus areas of a research study based on the 'result' and 'focus' of the literature review. It identifies the study's fundamental concepts, the assumed relationships between the concepts and the practical, theoretical perspective (Van der Waldt, 2020). In this research study, the researcher aims to show a positive relationship between women entrepreneurship and enterprise development. Underpinned in entrepreneurship and enterprise development theories, namely, resource-based theory and the subthemes human capital, social capital and financial capital theories. Enterprise development supports the propositions that women entrepreneurship can achieve exponential growth through enterprise development. The propositions are detailed under the categorical variables below, with women entrepreneurship and enterprise development as the overarching phenomenon.

Figure 2: Conceptual Framework



2.8 Conclusion

The literature supports this research study's problem statement and purpose. The following propositions will be proposed in the study.

2.8.1 Proposition 1: Enterprise Development criteria contribute to women's economic empowerment and 'growthiness' for entrepreneurial ventures.

2.8.2 Proposition 2: Incubation and Acceleration programmes in the REIPPPP benefit the national programme and women's economic empowerment.

2.8.3 Proposition 3: The REIPPPP, through responsive ED policy for women, can encourage entrepreneurship by women and promote women's economic empowerment.

2.8.4 Proposition 4: The REIPPPP through ED for women entrepreneurship can contribute to Sustainable Development Goal 5- Gender Equality

Table 2: Consistency Matrix

ADVANCING WOMEN IN ENTREPRENEURSHIP THROUGH SUSTAINABLE ENTERPRISE DEVELOPMENT: THE REIPPPP IN SOUTH AFRICA							
Research Aim	Literature Review	Research• Questions	Proposition	Phenomenon/Categorical variables	Source of Data	Data Type	Data Analysis
To understand how the REIPPPs EnD criteria contribute to women's entrepreneurship	Eberhard, A., & Naude, R. (2016) Tait, L., Wlokas, H & Garside, b. (2013). Ndlovu, Q. (2018) Mgxashe, (2021) Davies, Swilling, & Wlokas, (2018b)	To what extent is the REIPPPs EnD criteria contribute to women's entrepreneurship	P1: Enterprise Development criteria contribute to women's economic empowerment and 'growthiness' for women's entrepreneurial ventures.	1. Women Entrepreneurship 2. Enterprise Development 3. Enterprise development criteria	Semi-structured questionnaire	Transcripts	Thematic Analysis
To gain insight into how entrepreneurial programmes such as incubation and acceleration nurture women in entrepreneurship	Moyo, T. & Dhliwayo, R. (2019) McAdam et al. (2019) Alvarez & Busenitz, (2001) Mao, (2009) Ngoasong & Kimbu (2019)	To what extent can entrepreneurial programmes such as incubation and acceleration nurture women in entrepreneurship?	P2: Incubation and Acceleration programmes in the REIPPPP are beneficial for the national programme as well as women's economic empowerment	1. Women Entrepreneurship 2. Enterprise Development 3. Enterprise Development Programmes (incubation and acceleration)	Semi-structured questionnaire	Transcripts	

	Venter & Urban (2019) Bruton et al., (2021						
To investigate what REIPPPP EnD regulatory frameworks support enterprise development for women in entrepreneurship?	Eberhard, A., & Naude, R. (2016) Tait, L., Wlokas, H & Garside, b. 2013. Bruton et al. (2021) Venter & Urban (2019) Mgxashe (2021).	To what extent do REIPPPP EnD regulatory frameworks support enterprise development for women in entrepreneurship?	P3: The REIPPPP, through responsive ED policy for women, can encourage entrepreneurship by women and promote women's economic empowerment.	1. Women Entrepreneurship 2. Enterprise Development 3. EnD regulatory frameworks	Semi-structured questionnaire	Transcripts	
To explore REIPPPP's response to SD5 Gender equality in terms of the advancement of women in entrepreneurship	Urban & Msimango-Galawe, 2020 GEM, 2019 Moyo & Dhliwayo, 2019 Bruton et al., 2021	To what extent does REIPPPP respond to SD5 Gender equality in terms of advancement of women in entrepreneurship?	P4: The REIPPPP through ED for women entrepreneurship can contribute to Sustainable Development Goal 5- Gender Equality.	1. Women Entrepreneurship 2. Enterprise Development 3. REIPPPP's response to SDG 5	Semi-structured questionnaire	Transcripts	

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this chapter is to describe the research approach to qualitative inquiry, in this can this narrative research study. Qualitative studies set out to interpret world views, collating representations, interviews and conversations. This research method is described as studying things in their natural setting and making sense of it, or interpreting phenomena on how people bring meaning to it (Creswell, 2007; Denzin & Lincoln, 2005:3) This study is a qualitative research study which collects data through existing literature and conversations through semi-structured interviews. An inductive approach to this research supports valuable evidence-based stories by South African economic development professionals and women entrepreneurs about their experiences.

3.2 Research Philosophy

"The research philosophy provides the basis for understanding the natural phenomenon and can be used to solve human problems" (Kumatongo & Muzata, 2021, p. 16). Subsequently, an inductive approach is used as theory guides and supports the research (Bryman & Bell, 2011). Interpreting and exploring resource-based theory supports the extent to which enterprise development in the REIPPPP can benefit women entrepreneurs in informal sectors to improve the economic inequality of women as well as contribute to SD5 targets.

3.2.1 Interpretivism

This study focuses on interpretivism as the research paradigm (Kumatongo & Muzata, 2021). Kumatongo & Muzata (2021) believe that reality is based on people's subjective experiences, and therefore gaining access to these learns is through social constructions such as language, consciousness and shared meaning. Interpretivism is crucial to the research to understand the political response to feminism, specifically through mechanisms such as establishing women's entrepreneurship. Qualitative research is said to "aid in implementing social change for feminists" (Bryman & Bell:419). This chosen method provides an inclusive platform for South African women-owned businesses and

upcoming women entrepreneurs from the community benefit model of the REIPPPP, as it provides "a richer, deeper understanding of the meanings that people place on actions, events and relationships" (Mwiti & Goulding, 2018, p. 808). Using an interpretivism paradigm may not make a considerable contribution to the analysis socially due to the multiple perspectives; however, in this research, there are norms which are shared equally (Alharahsheh & Pius, 2020).

3.2.2 Inductive Approach

The principal orientation of the qualitative study is inductive in its approach, whereby propositions are the outcome, and the observations and findings inform theory. A *qualitative study* is a research strategy that emphasises words and not quantity. Creswell (2007) states that inductive data analysis is used by qualitative researchers to form patterns, categories and themes from the very beginning, rearranging data into units of information. The research will revisit themes and develop a database to create an established set of themes.

3.2.3 Qualitative Research

A qualitative approach "seeks to explore individuals' understanding of social phenomenon" (Kumatongo & Muzata, 2021: 23). It is described by Mohajan (2018) as a social action focused on how people find meaning and make sense of their social reality. It has a favourable implication for how social challenges are investigated (Bryman & Bell, 2011: 30). This approach is majorly investigative through contrasting, comparative analysis, replicating and classifying what is being studied (Creswell & Creswell, 2018); (Kumatongo & Muzata, 2021). Qualitative methodologies are suitable for the research as they allow exploring beliefs, intentions and behaviour (Mwiti & Goulding, 2018). Given the limited research on this topic, it is also preferred in early-stage research (Belotto, 2018). It is seen as more consistent and adaptable to those values. Therefore, the research adopted a value-neutral approach by engaging with respondents and people as people being studied, not as instruments (Bryman & Bell, 2011, p. 30). Qualitative research can be interactive or non-interactive through interviews, diaries, journals, observation and open-ended questionnaires to collect and interpret data using thematic analysis methods (Kumatongo & Muzata, 2021). This research methodology is suitable giving a holistic account of a complex problem investigated in this study (Creswell, 2007).

3.3 Research Design

As referenced, social constructivism-interpretivism notices the differences between social sciences and that of natural sciences, which require a different logic in a research procedure, distinct to humans and not natural order (Bryman & Bell, 2011). There is a clear link between the research being conducted and the participants, as they must be distinct from the knowledge they provide (Saunders et al., 2012; Alharahsheh & Pius, 2020).

The research design is based on primary and secondary data through an interpretivism approach to structured interviewing, including desktop data collection through existing research to support the findings and recommendations for advancing women in entrepreneurship supported by ED investments in the REIPPPP.

The structured interview questionnaire was designed to inform the research aims and expected outcomes and seeks to reveal the socio-political aspects that affect ED initiatives for this project.

3.3.1 Sampling

Purposefully, the research sample is non-probability and was carefully selected based on collecting 'rich' information (Patton, 1990: 169). Sampling is critical in deciding how reliable and trustworthy the outcomes (Santy et al., 2008). This method was preferred, to select individuals who have experiences to share (Creswell, 2007). These stories were analysed by the researcher and reorganised into a framework projecting the key themes as the researcher found causal links amongst the narratives (Creswell, 2007). The sampling for this study considered the target population, sampling design, sample size and method.

3.3.1.1 Target Population

A target population is considered as a group of people under examination (Burns & Bush 2002; Sin, Cheung & Lee, 2009). The researcher aimed to demonstrate a target population considered female, female owners of business operational in the renewable energy sector in South Africa. The target was placed on women entrepreneurs' country wide, and not strictly to a particular province or district. The target population also included economic

development specialists who are implementing enterprise development projects under the Renewable Energy Independent Power Producer Procurement Programme.

3.3.1.2 Sample Size

Sampling is described as the process of selecting “a portion, piece or segment” that represents a whole (Onwuegbuzie & Collins, 2007: 281). The sample informs the quality of inferences made by the researcher from the findings. The sampling scheme is maximum variation, selecting “settings, groups and individuals to maximise a range of perspectives (Onwuegbuzie & Collins, 2007: 285). The sample size is 16 and in qualitative research can be used to represent exploratory research. Participants in this study are professionals are economic development managers, industry heads, advisory and women entrepreneurs who have operationalised their businesses in the sector. This sample was purposefully selected to maximise the understanding of this complex phenomenon. For a phenomenological study < 10 interviews are required (Creswell, 1998).

3.3.1.3 Sampling Frame

The sampling frame for this study is non-probability. Non-probability techniques are used when there is no existing population that is being investigated. Non-probability sampling is used to target a particular group of the populations (Galloway, 2005). The study uses snowball sampling, which is described as convenience sampling, whereby the initial invited participants will invite other participants to take part and create a “pyramid effect” (Albert et al., 2010).

3.4 Research Participants

The participants for this study represent different actors in economic development within the REIPPPP, namely economic development managers of utility-scale independent power producers, economic development advisors, NGO stakeholders, the renewable energy incubator, and women-owned businesses operating within the renewable energy sector. The study occurred virtually, although a small number withdrew due to load-shedding challenges and poor internet connectivity. The participants are in the Western

Cape, Gauteng and Free State provinces in South Africa, with a project listing throughout the country.

The participants are diverse and represent the various women working in the economic development space within the REIPPPP. This was made possible with the support of the Director of We Connect Renewable Energy South Africa (WeConnectRESA, 2021) needs a proper reference, an industry-led women's network. Their mission is to "act as a mechanism of opportunities within the renewable energy sector for women focused on connecting and growing their networks, knowledge sharing and mentorship" (WeConnectRESA, 2021). In addition, the South African Wind Energy Association and South African Photovoltaic Industry Association are two industry bodies which have created a "Gender Diversity Working group" to address issues of diversity within the sector and ensure that objectives are met (SAWEA, 2022).

Table 3: Biographical Details

Name	Occupation	Gender	Race	ED Professional	Entrepreneurs
Participant 1	Country Economic Development Manager	Female	Coloured	Yes	-
Participant 2	CEO	Male	Indian	Yes	-
Participant 3	Head of Research and Advisory	Female	Coloured	Yes	-
Participant 4	CEO	Female	Indian	Yes	Yes
Participant 5	Head of Strategy and Growth	Male	Black	Yes	-
Participant 6	Social Performance Advisor	Female	Coloured	Yes	-
Participant 7	Senior Social Performance Manager	Female	Black	Yes	-

Participant 8	Economic Development Manager	Female	White	Yes	-
Participant 9	Partner	Male	White	Yes	-
Participant 10	Managing Director	Female	Coloured	Yes	Yes
Participant 11	CEO	Female	White	Yes	Yes
Participant 12	General Manager	Male	White	Yes	-
Participant 13	Managing Director	Female	Black		Yes
Participant 14	Managing Director	Female	Indian		Yes
Participant 15	Founder	Female	Black		Yes
Participant 16	Founder	Female	Black		Yes

3.5 Research Instrument

For this research report, data was collected through semi-structured interviews, a set of general questions framed in a structured interview schedule (Bryman & Bell, 2015). The researcher is allowed to ask follow-up questions to the responses. Interviewees received the same set of questions for answers to be aggregated and reliable. Participants respond to the same cues; therefore, collecting data forms part of the typical social survey research (Bryman & Bell, 2015).

3.5.1 Semi- Structured interviews

Using interviews in a qualitative study is one of the primary methods of data collection. Questions are used to probe responses by interviews to provide more detail of their experience. The use of a semi-structured interview supports specific research outcomes. These outcomes are developed by research by referring to specific topics on the interview guide (Starks & Brown Trinidad, 2007).

Initially, as proposed, the researcher sought to reach out to key stakeholders from the renewable energy sector to co-develop the instrument; however, participation was encouraged by other participants “snowballing effect”. The researcher held 16 non-random virtual interviews. The semi-structured interview questionnaire was designed in

two parts. The questionnaire focuses on 1) Demographics, 2) Enterprise Development, 3) Women's Economic Empowerment, 4) The Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) and 5) Gender Equality to SD5.

3.5.2 Interview Guideline

The study will rely heavily on perspectives from industry experts and women beneficiaries. Two semi-structured questionnaires were developed for this research study. The first questionnaire was designed for industry participants. The questionnaire started with introductory question about their role and designation followed by demographical information to understand their gender, age and highest level of education. The second set of questions refers to the advancement of women in entrepreneurship, these questions have been tailored to identify how industry participants understand women entrepreneurship, how their companies are support women entrepreneurs and if they implement any entrepreneurial programmes. The third component of the questionnaire aims to understand how women's economic empowerment is prioritised and is do their companies contribute to it. The conversation continues to understand the long term and or sustainable initiatives that exist in the renewable energy sector; this includes good policy frameworks and critical success factors for women entrepreneurs. The final section focuses on gender equality, in understand how the views on gender responsive entrepreneurial programmes, gender responsive frameworks for equal access, women's contribution to reinvestment in communities and lastly understanding access to capital and social networks by women entrepreneurs.

The second questionnaire developed for women entrepreneurs, starts with demographic information, defining their business ownership and whether they have participated in any enterprise development programme such as incubation. The second part of the questionnaire explores entrepreneurs' views on decision make in delivering outcomes, the importance of well-funded initiatives in the renewable energy sector as well as the length of programmes to deliver sustainable results. The views of women entrepreneurs on whether they felt that good policy frameworks could provide quality results and a fostering environment for business is important. Finally, this section ends with their views on capacity development as a critical success factor. The final part of the questionnaire on gender equality focuses on their views on gender responsive programmes and the

impact on livelihoods; gender responsive policy frameworks, women's impact on community, ending with their views on access to capital and social networks.

The research was collected based on the whole experience of the participant and not just certain parts. The questions have been influenced by the researcher and the level of involvement which would be valuable in developing the propositions. Therefore, formal discussions are essential for understanding the human experience (Alharahsheh & Pius, 2020).

All participants were notified at the start of the interview that the interviews were being recorded and transcribed. The transcriptions were exported and uploaded onto google drive for analysis. The recordings were used for coding, categorising, and formulating themes and likeness patterns.

3.6 Data Collection Methods

The study received approval by the University of Witwatersrand, Wits Business School Ethics Committee (see Annexure A). The research participants were informed by the WeConnect Renewable Energy South Africa group, a women's social network for women working in the sector. The interviews took place virtually and lasted no more than 30 minutes. Data collection took place over ten weeks. Participants' requests for participation took place on an industry economic development WhatsApp group platform where they could express their interest and request a suitable timeslot. Participants were contacted via email and other social Networks. All 15 participants were from 15 different companies and organisations within the sector. Participants were informed that their participation is voluntary and that their personal details as well as company name will not be declared during this study, confidentiality will be upheld.

3.7 Data Analysis

The study takes the narrative research approach, exploring the stories of the individuals participating in the semi-structured questionnaire. The participants' experiences are essential to interpret their views on reality in this study. Narrative research is rooted in social and humanities disciplines, whereby narrative can be the study's method and

phenomenon (Creswell, 2007). According to Polkinghorne (1995), the narrative approach is distinguishing which creates descriptions of relevant themes across similar stories and analysing narratives through paradigm thinking to create descriptions of themes (Braun & Clarke, 2012). The patterns identified are related to the variables listed in this study. The thematic analysis allows for flexibility in various ways, looking at meanings across the entire data set or a specific phenomenon (Braun & Clarke, 2012).

Qualitative researchers have become more interested in testing theories through growth and strategy, which relates specifically to women in entrepreneurship and what the renewable energy sector can do to advance women in business through the REIPPPP. This could lead to further data collection, especially when the theory can be tested further. During the data assessment, the recognised themes provide a general sense of where that theme derives from and guidance on what may come from empirical instances (Bryman & Bell, 2015). However, it could be problematic should specific phenomenon be placed under headings; therefore, structuring and coding are essential so that what is said by the interviewees are preserved.

3.7.1 Thematic Data Analysis

Thematic analysis is a qualitative research method which seeks to identify patterns and meanings from the data collected (Finlay, 2021). Thematic analysis is suitable for this research due to the flexibility and low reliance on theoretical and technical insights of other qualitative approaches (Braun & Clark, 2006; Nowell et al., 2017). Thematic analysis will allow for systematically identifying, organising, and offering insight into patterns of meanings, which also means themes that may come from the dataset. Focusing on meaning across the findings makes sense-making easier and finding collective, shared meaning and experiences (Braun & Clarke, 2012; Nowell et al., 2017). *Phase one* of thematic analysis is to seek familiarity with the data, thus doing manual transcription to immerse deeply into the data. During this phase, taking notes, reflecting, and listening to video and audio recordings would provide a thorough analysis (Byrne, 2022).

Phase two of thematic analysis is generating initial codes with short descriptive and labelling for interpretation according to relevance to the research questions. Coding should be brief based on interesting outcomes and themes which may start to develop.

Phase three represents the collation of codes to generate meaningful themes and could see many codes collapsing due to shared meaning and becoming one code (Byrne, 2022). The researcher actively seeks the relationships between the various codes to determine how the linkages can inform the narrative of a particular theme.

During *phase four*, the researcher uses suggestions of Braun and Clarke (2012) using research questions that address potential themes making sure that there is enough identification for it to be called a theme and that there is enough data to support the theme, including that they are interpreted well (Byrne, 2022). At that point, coherent patterns are visible and can constitute a logical argument (Byrne, 2022). In *phase five*, the research will present the analysis details using a thematic framework where themes are defined, and the researcher selects which data items are used to write up the results. A series of extracts informs a selected theme to verify and provide meaning. *Phase six* of the analysis is the stage where the report is complete, and inspection can occur (Byrne, 2022).

3.7.2 Coding in Thematic Analysis

"Coding is the creative link between data collection and analysis based on the selected data" (Jnanathapaswi, 2021, p. 5). It is the first step in analysing meaningfully as the findings are interpreted. Using a codebook approach is understood to ensure reliability through a "structured codebook" (Byrne, 2022, p. 1393). The codebook allows the reader to understand the concepts, themes, and summaries around the categorical phenomena. "Coding process allows for the interpretation of large segments of texts and information and new ways" (Belotto, 2018, p. 2624). Saldana's approach to structured coding assisted in labelling according to the research questions.

Coding as a method then becomes very important in the data analysis of this research as it consists of labelling, separating, compiling and being able to organise the data and is much different for a qualitative study as the data seek potential indicators which then can be compared (Bryman & Bell, 2015). Therefore, this study uses selective coding centred around the study's variables. The selection procedure systematically relates to the other categories by validating the relationships between those variables, such as women's economic empowerment and gender equality.

The six-phase approach in the thematic analysis familiarises and immerses oneself in the data through reading and re-reading; "generating initial codes which are the building blocks of analysis, they provide a label for a feature of the data which is relevant to the research question" (Braun & Clarke, 2012, p. 6).

3.9 Ensuring Trustworthiness

Trustworthiness and authenticity are vital for this study as it relies on the following criteria Bryman and Bell (2015) mentioned: credibility, transferability, dependability and confirmability.

3.9.1 Transferability

It is a requirement that the researcher provide the details a particular setting, event and a description for the reader to assess if the research can be applied in another context (Junjie & Yingxin, 2022). The research process has been developed to achieve transferability by providing clear and precise research procedures and methods according to the narratives that have been formed. This process ensures that other researchers can use the findings of this research study for reflections and comparative analysis.

3.9.2 Credibility

During the data analysis process, manual text data was used for thematic analysis to generate codes, themes and categories to ensure thorough data analysis to accurate project findings. The researcher applied triangulation methods for data analysis through synthesis and to extract information, such as the semi-structured interview transcripts for thematic analysis. Following Saldana's coding methods, data is coded by highlighting texts and quotations and assigning codes to link similar responses that show commonality. Codes generated using the software allow the researcher to search and retrieve articles of relevance. The code functionality also helps "facilitate text searches across multiple questionnaires and assignments of pre-selected codes for matching text selections" (Smit & Scherman, 2021, p. 2). Through this process the researcher ensures credibility by using the appropriate data collection procedures, ensuring complete transparency with participants as well as a clear and rigorous research process.

3.9.3 Dependability

According to Brock-Utne (1996) to achieve dependability, external reviews should be used. For this study the researcher was under the supervision of the professor supervising this research. The research was further reviewed by two independent researchers on the codes generated (Belotto, 2018).

3.10 Ethical Considerations

Upon ethics clearance, each participant was notified about the consent required and signed a consent form (see Annexure B). At the start of each interview the participant was notified that the interviews were being recorded for research and note taking purposes. An introductory passage on the research study was read to the participant and upon completion asked the participant if they wished to proceed. All audio recordings, transcriptions and interview notes have been stored electronically in a safe space. The researcher and research supervisor has access to the data. Due to the social nature of this research and enforced policies, all respondents were encouraged to participate based on confidentiality. The findings were reported objectively regarding the research outcomes and refrained from personal subjectivity.

3.11 Conclusion

In this chapter the researcher describes the methodology used to conduct this research study. The research philosophy and design are defined. The population and sample of the study is introduced, and the research instrument used in the study is explained using the semi-structured interview method with two-part interview guide for building the narrative. The data analysis methodology is conveyed using thematic analysis and triangulation. Finally, the research provides further insight into transferability, credibility and dependability of the study.

CHAPTER 4: RESEARCH FINDINGS

4.1 Introduction

This chapter presents the findings of the research study using thematic analysis. It explains how manual text data was used to generate codes, themes and categories through data analysis to ensure that the findings are accurate. Key themes emerged from a series of codes categorised collectively to form a thematic framework called a codebook. The themes consider entrepreneurship theories and resource-based theory and its interpretation on the data collection for women entrepreneurs and enterprise development in the REIPPPP.

The codebook was used to identify initial codes from all the respondents. Next, the codes are grouped, and patterns are formed to formulate themes. Finally, the researcher continued into a triangulation process whereby the researcher re-immersed herself into the data collection by relistening to recordings of the semi-structured interviews and verifying key patterns using quotes by respondents to identify if the patterns are valid.

The study uses an interpretivism paradigm in understanding enterprise development and women entrepreneurship in the REIPPPP. Participants shared their experiences and views on the related identified categorical phenomena as stated in the research questions. The themes listed in the table below represent the findings from the research study. The interpretation provided is based on the participants' views and their narratives of their experiences.

The table below represents the codes and themes formed through thematic analysis after data collection.



Figure 3: Research Categories and Themes

4.2 Demographics

The study has a total of 16 participants, which are referred to as participants during data collection. Of the respondents who served as participants in this research study, 4 of them were male, and 12 respondents were female. Most participants are South African, with 1 participant born in Lesotho. A total of 7 of the respondents were categorised as entrepreneurs within the REIPPPP and 9 as senior executives in economic development implementation in the REIPPPP. All 16 participants have formal education, with 15 having postgraduate education and 1 completing her bachelor’s degree at a university.

Table 4: Participants Demographics

Participant	Gender	Age	Race	Education	Ownership	Years in Operation	Industry	Source of Capital
13	Female	30-40	African	Bachelors	100% WO	<5	EE	Personal
14	Female	30-40	Indian	Postgraduate	100% WO	<5	IPP	Personal
7	Female	40-50	Indian	Postgraduate	100% WO	>5	ED	Personal
10	Female	50-60	Coloured	Postgraduate	100% WO	>5	ED	Personal
12	Female	30-40	African	Postgraduate	100% WO	>5	PD	Personal
15	Female	50-60	African	Postgraduate	100% WO	<5	ED	Personal
1	Female	30-40	Coloured	Postgraduate	100% WO	>5	ED	Personal

4.3 Presentation of Categories and Themes

4.3.1 Entrepreneurial Landscape in REIPPPP

A range of dominant themes established during the semi-structured interviews notes that women's participation and entrepreneurship are marginal due to historical imbalances. Preceding the orientation of entrepreneurs in the sector, in which most respondents answered gender neutral. The entrepreneurial orientation is the extent to which micro-enterprises are initiated based on innovativeness, risk-taking, or being proactive in their market. The micro-enterprises operating in the rural or informal economy are classified according to the opportunities that present themselves to the community or are identified by an economic development manager of an IPP with their district. Informal

entrepreneurs and micro-enterprises are viewed as a financial risk by investors and need help to meet the criteria for financial support.

4.3.1.1 South Africa's Historical Imbalances

It is a dominating view that South Africa's historical imbalances are a significant contributing factor to the state of women entrepreneurship in the country and not mainly just in the renewable energy sector. Therefore, by default, they have limited resources such as human capital and financial and social capital. Respondent 16 believes that *"Dating back to the apartheid year, previously white South Africa focused we were never entrepreneurial in that system we were almost guaranteed a job so why would be entrepreneurially minded if it was not needed and no one stimulated it. When we became a democracy, we were not just backlogged with an entrepreneurial mindset but with education; there were not enough jobs, and all our social cues were directly related to our past."*

Respondents 5, 6 & 10 shared that women in informal South Africa within the rural towns are very traditional in their thinking and that entrepreneurship is a means to an end employing survival, sharing that *"there are traditional women and it is hard to change their mindset of "women must stay at home" "women know their place is at home" amongst all those women there are women with so much potential"-* Respondent 5. It is supported by projects north of the country.

"In the Free State, they are a lot more traditional in rural areas and urban areas, women are focused on construction and again are more progressive" "In the northern cape, a lot more traditional and not looking at opportunities within infrastructure development"- Respondent 10

"We were never taught to think like entrepreneurs because it was never needed, and when we became a democracy, we had so many other problems that being an entrepreneur was not the focus"- Respondent 16.

Respondent 11: "One of the fundamental and historical challenges in South Africa is people cannot access working capital unless we have working capital at an affordable price to turn the projects. Historically, the major problem small businesses cannot get hold of is working capital-project finance."

4.3.1.2 Entrepreneurial Orientation

In terms of enterprise development in the renewable energy sector under the REIPPPP programme, it was identified by any of the respondents that this was only becoming a requirement from round 3 projects bidding in the Independent Power Producers with the role primarily to take a proactive approach to entrepreneurship as a sector. *"When we talk about entrepreneurship in the RE space, it is creating new local businesses throughout the supplier chain of renewable energy; we look at what it takes to develop, implement, construct and maintain RE projects, and entrepreneurship fits into any part of that value chain- Respondent 3.*

Respondents defined *women entrepreneurship* in the REIPPPP as a small business coming from a grassroots perspective. *"I think of grassroots organisations because that is where you would find the most women participating"- Respondent 6.* It meant owning IPP projects to the extent of how much of a particular business a woman owns. Developed and supported businesses are a requirement from an economic development programmatic perspective. *"When we speak to women entrepreneurship, we look at ownership, how much of that business are women-owned. "At the impact of women, creating small businesses in RE from an ED point of view, very much quoting the REIPPPP IPP programmes requirements from an ED perspective"- Respondent 2.*

4.3.1.3 Entrepreneurial Intent vs Opportunity Recognition

Most of the respondents who are working in the informal sector within the REIPPPP had shared narratives about how communities in that *"Entrepreneurship bring forward their entrepreneurial intent for many is a means to an end, they have less than zero" - Respondent 2 this is supported by "You will have a woman with a business that is focused on making enough to make it through than focusing on expansion"- Respondent 6*

Women's business activities in the informal sector are mainly to survive and for their families. *"Even if it is there, women are busy with other things, and we can assume that it is not there for them unless you are a woman with an entrepreneurial spirit-Respondent 6*

Women thus pursue doing business transactions in areas such as catering, childcare, and laundry services to seek a source of income and are seen as employment and not

entrepreneurship. Their need is to survive more than recognise an opportunity. *"I understand it as women who see a need or have a survival need and over the years have seen businesses started due to an opportunity" - Respondent 10.*

Development support agencies and established women-owned businesses see this as an opportunity to develop women entrepreneurs. *"Our business started by seeing an opportunity in the REIPPPP" "Women that we work with do not see themselves as entrepreneurs; they see themselves as having a job, and helping them to identify as an entrepreneur means you have to grow with them"- Respondent 10*

The opportunities seem vague. There are "pockets of opportunities" for communities. However, they need to be skilled and exposed to the circular economy, where more than one supplier can procure their services. Respondent 11 stated, *"It has shown minimal entrepreneurial opportunities for SMMEs in the REIPPPP. The opportunities for micro-entrepreneurs are in the auxiliary supporting process. "There are pockets of opportunities for micro and small enterprises to support some of the value chain activities such as security services, laundry, catering, monitoring, electrical contracting to some level."*

4.3.1.4 Entrepreneurial Risk

Start-up micro-enterprises are seen as a risk by investors and in the ecosystems due to the nature of required guarantees on craft. *"An IPP will not allow a micro-enterprise to do the main installation that needs to be guaranteed, and if he or she works independently, it is improbable that they can provide the guarantee required for financial close"- Respondent 11.* This response is supported by the majority of respondents who mentioned that by being a woman, their risk profile is higher and that if gender were mainstreamed, we could see a change over time *"Women are viewed as riskier than men by funders, and I do not know why if we are not seen to have the muscle for a start-up" It is difficult because they have been historically disadvantaged and even if they work they earn less by being a women South Africa is trying to change the trajectory. However, it is going to take time"- Respondent 15.*

1.3.2 Enterprise Development Criteria in the REIPPPP

1.3.2.1 Criteria

The renewable energy sector is relatively new and still in its infancy, with an industry that only started to take off between 2011 and 2012. In just over 10 years, a dominant view is that the sector is changing rapidly. Policies that are not transforming alongside the sector could not only limit entrepreneurship for women but limit the societal impact in communities that are meant to benefit richly. *"Policy is a tricky one, with the industry moving so quickly and changing so quickly, and policy does not catch up as quickly" - Respondent 6.*

Criteria are viewed by Respondent 7 in response to community development and fulfilling obligations stating that there has been little progress in economic development to drive women entrepreneurship *"the REIPPPP ED space has done very little to progress economic development, there is such a huge gap between community-level organisations and fulfilling job creation supply chain requirements, and the assumption that underlies the REIPPPP is that addressing community needs, we can address supply chain needs "that is impossible an uncle that is a backyard builder in rural Eastern Cape is never going to be able to operate a construction business that puts up wind towers."*

Another barrier to entry is the criteria for bidding in the REIPPPP, making it very difficult for local project development companies to compete with international companies that continue to populate the sector with consistent procurement nationally. Development Financial Institutions (DFI's) such as the Development Bank of South Africa (DBSA) and Industrial Development Corporation of South Africa (IDC) are open to financing local black women-owned enterprises competing in the space. *"The DBSA ring-fenced a black women-owned fund to help us develop our projects"- Respondent 16, however, have set very high criteria for those loans at very high-interest rates, "they told us OK great, you have these projects; how far are they developed. They told us it must be 80% developed before they can give us the money". For Solar PV, an EIA costs R2mil". We had a tremendous amount of support. We raised R4bn. We had massive support from DBSA, IDC, PIC, and we decided not to bid because the cash flows from those projects could not pay off those loans, and it did not make sense"- Respondent 16.*

1.3.2.2 Compliance & Reporting

Remaining compliant with stakeholders, the government or the community is a dominant theme in asking how much women entrepreneurs are supported and prioritised in their work and projects. Respondent 1 stated that *"It would be difficult to say we support it, or we do not support it; it depends on the strategy that you are working on" If women are identified as a vulnerable group in a specific community, then it would be flagged* *"Giving opportunities like a grant or training."*

The BBBEE codes are used as a compliance tool to ensure women's participation in the value chain and access to the market and shared opportunity. However, under the BBBEE codes, *"you need to be scalable, you are not going to enter a programme where the beneficiary is going to be reliable on the sponsor forever, they have to be sustainable, and there has to be a clear exit strategy from day one. According to the BBBEE codes, you cannot have one client because that is not sustainable. The way we implement programmes is that you can provide services to multiple clients"- Respondent 10*

Compliance is understood and defined by respondents to include reporting as a mechanism of accountability, where respondent 1 continued to inform that *"When you do report, you are often expected to report on women-owned vendors, and sometimes it feels compliance-driven"*. Respondent 16 mentioned that it would be based on *"whether our clients insist on gender preference, then we would weight our scoring"*, and respondent 8 stated that they *"work towards our clients meeting their compliance requirements"*. Accountability through ED reporting is regulated periodically, and you could be penalised if the milestones are unmet. *"You do quarterly reporting and could be compliance-driven, but it is done quarterly, and I appreciate the frequency of reporting"* *"There are thresholds where you can get termination points" - Respondent 1*

Enterprise Development Agencies such as incubators are not able to provide finance in terms of business loans to micro-entrepreneurs to assist in start-up capital or for scaling due to *"FICA and phase rules and the credit act rules incubators cannot lend money to entrepreneurs because we are not a lender, we do not qualify under the national credit act. They have specific requirements, and the moment you meet those requirements, you*

may as well compete with commercial banks who have the capital mass to administer these loans; therefore, they do not come quick and easy"- Respondent 11

4.3.2.3 Social Performance: Monitoring and Evaluation

A common theme that 4 respondents mentioned was that monitoring and evaluation of social impact programmes, such as enterprise development, are functioning poorly. *"M&E is not being done properly" "Do we know how to monitor? Because it will tell the truth about how your programs have failed"- Respondent 1.*

Gender equality is broadly proclaimed within the sector. However, the impact is not being measured to tell how they have been implemented and executed to foster ecosystems inclusive of women entrepreneurs. *"They all say SDG 5, but we do not know to what extent until the deals have been executed and there is no way to measure it" - Respondent 7.*

Economic Development plans inclusive of enterprise development non-gender specific are constructed entirely and well put together, *"but how has it been implemented and materialised? "When you work towards compliancy, you miss the impact"- Respondent 12.*

According to respondent 13, an entrepreneur operating in energy efficiency mentioned that prioritisation of women in business and women participation is supported by the *"40% set aside not just for renewable energy, it is a policy by the government which has been promulgated and my question is how is it measured? Are there evaluations to say women benefit from this 40%, and what does that mean? More needs to be done regarding gender mainstreaming and gender equality to empowerment in the public and private sectors.*

1.3.3 Enterprise Development in the REIPPPP

1.3.3.1 Incubation and Acceleration Programmes

The South African Renewable Energy Business Incubator (SAREBI) was initially created to stimulate enterprise development from IPPs with the economic development component. Respondent 11 explains that *"the incubation programme is geared towards*

very early stage either ideation or early-stage revenue, which is a business skills workshop series. It is a virtual offering geared towards people in the Northern Cape and Eastern Cape. Each module has five workshops and a pitching opportunity. We focus on teaching principles to aspiring entrepreneurs on value proposition, business model, financial feasibility, financial sustainability and costing.

SAREBI found that micro-enterprises struggle in the ecosystem due to the need for more technical knowledge and experience in the green tech sector; therefore, many of them need help to remain sustainable and scale. *"In this sector, you need a technical vocational skills capacity; if you are not an electrician, you are going to have difficulty becoming a PV installer" You need to have some experience in your chosen field and once you have the technical experience and the skill you will find you will have more likely to have a high level of sustainability and success- Respondent 11.*

Dropout rates on training programmes hosted by the business incubator increase when participants who participate are introduced to the programmes' financial management and costing functions *"because they do not know how to pay for that service."*

"There is an offering for micro-enterprises who are already revenue generating and have "some track record trading between R40-100k, R100-500k and R500k K and above. The programme is to outsource you are the back office to SAREBI, and we will fix it. All companies come to us if their back office is broken. The back office consists of accounting, human resources, industrial relations and information technology". Respondent 11

When asked if longer-term programmes such as the one mentioned would be more sustainable and beneficial to the enterprises, it was a standard view by respondent 1 that *"It not about long term it is about localisation and how you are handing projects over to the communities" Long is not equal to more sustainable"* and respondent 2, that *the sector is evolving so quickly that you are unable to have a long term view of what will still be relevant in 12 months, it is about identifying the needs and gaps now with the overarching intent to make sure you are being responsible in terms of gender diversity, transformation, youth inclusion all of this needs to be in your business plan and your mind in implementing any intervention."*

A total of 3 out of the 7 entrepreneurs who were interviewed participated in entrepreneurial programmes, which allowed them to grow in entrepreneurial skills. "*EmpreTec was my first introduction to moulding myself into an entrepreneur, as well as the Future Female Green Tech programme and EMgro programme SAICA. In addition, respondent 12 mentioned that she was part of The Google Hustle Academy, which introduces you to make but how google tools can make an impact on your business. She was also part of the Tony Elumelo Foundation.*"

These entrepreneurs paid tribute to how these programmes have accelerated their social dexterity and knowledge about their business and access to the market "*I am a testimony to having participated in such programmes and having grown and learnt being able to exploit opportunities through the people that I met because of the programmes I have been a part of*"- Respondent 13.

1.3.3.2 Skills Development and Training

A common theme focused on human capital is evident in most enterprise development programmes across formal and informal programmes prioritised in economic development plans and mentioned by nearly all economic development professionals who participated in this study "*we run ED programmes in we work in communities like business 101, running a programme to teach entrepreneurs how to present, market, research and set up an account*"- Respondent 9.

Many entrepreneurial programmes focus on essential business skills and sustainable management of their enterprise. Notwithstanding that cash flow is integral for all businesses and the need to know how to manage it, "*it is a must, the thinking of supporting an individual for 6 months and working away and placing them under incubation sorts out the problem it does not*" "*The principle of teaching them of how to manage a business together with cash flow is critical for any small business is and takes much time and much money*"- Respondent 2.

Entrepreneurial programmes are said to have less value and are not sustainable if they are less than 24-26 months respondent 10 stated, "*to grow the business. If you are entering a development phase, you can only look at a programme for 24 months, and it is a 24–36-month process if you want to see some level of success. We have seen people in road*

infrastructure and agriculture, and part of the mentorship provided access to the market but is based on the programme's structure.

However, some programmes are a "hit and run" and have not been successful" and "lightweight programmes are photo opportunities, instead of getting into the community and understanding the trauma that these communities are facing" The longer-term programmes are a definite must and should be nothing longer than 3 years"- Respondent 16.

Respondent 9 shares the standard view by respondent 10, stating that *"Longer term and intentional programmes because REIPPPP did not have SD component in previous rounds it will have for round 6, there was not a push for absorption for people coming off on the ED programme. There is no throughput or linkages, and those ED programmes' impact must be felt.*

1.3.3.3 Capacity Building

Most respondents view capacity building as critical since *"there are not many good stories to tell whether you are a male or a female, so I think capacity building generally is necessary"- Respondent 1 and with trying to establish women entrepreneurs.*

"The proposition for the women-owned vendors is small. However, it is something that the IPPs are struggling with. Therefore, it is commercially imperative for IPPs to develop women entrepreneurs within the 50km radius and their procurement pipeline"- Respondent 9.

Respondent 2 and Respondent 10 viewed capacity building as an imperative fact that *"in South Africa, given our education is a challenge" - skills such as financial management, basic accounting, and reading a contract. We do not have communities that know and understand that" this is supported by respondent 2, stating that "1) basic education and awareness, 2) capacity building giving them the skills across the board on all of these aspects, and its basic skills on how to open a business, how do you manage a business, what are your critical requirements, what are you compliance documents required, how do you get your tax clearance, how do you run financial models, how do you hire people and the labour laws around it, so it is simple attributes to running a business that is not clear and we need to create more accessibility to those kinds of training programmes" is*

of great importance to having more women entrepreneurs have the skills needed to start business and to participate in the value chain to be able to recognise opportunities and compete in the market.

Respondent 6 agreed with this response *"if we look beyond the community development part, if we look at women's participation, women will benefit extensively from having participated in that."*

It was encouraged despite South African history that if we do not stimulate more women entrepreneurs into the economy as a country, we are operating way below optimal *"by that being a societal ill" "you have got 10 engines, and we are using 3 that is what happens when you do not include women to express themselves fully; there is so much we are leaving on the table when we do not bring women in to solve problems"- Respondent 8*

Bespoke entrepreneurial programmes will allow for further empowerment by women if it makes room for the reality of women's lives and traditional norms as expressed throughout the research findings as caregivers and home builders *"we should focus more often on women's soft skills- many women sit with trauma and the lack of support in our vulnerable communities and are not cared for"- Respondent 16.* However, contributing a different view of focusing on just soft skills of the daily reality, entrepreneur and respondent 13 is of the view that *"While it is important to focus on personal development and emotional well-being, we tend to give too much focus on that and forget the crux of what business is about, we want to grow, we want to make money, and we want to expand as an entrepreneur. "We focus on the women's internal politics."*

1.3.3.3.1 Cooperatives

It was a dominant view by four of the participants that development support agencies, cooperatives and forums are meaningful in the enterprise development domain. Enterprise development funds have been between 0.2 and up until 1% recently, as explained in the research problem, which defines the limited budget for community development, especially for establishing women entrepreneurs. For that reason, many IPPs are working alongside cooperatives within the respective communities. For example, *"In the Northern Cape, we have supported female cooperatives, one is a farming*

cooperative and the two others a sewing cooperative" in partnership with SEDA and Mme Re Ka Thusa, which is keen on supporting cooperatives in that space, for the sewing cooperatives the government is sponsoring the training and our developer has supported the setup costs - respondent 9. This view is shared with respondent 10, who stated that they have stepped into the act as implementing agencies working with cooperatives "We have acted as implementing agents for companies that have reached O&M and worked with women-owned cooperatives."

There is a low number of women and youth that enrol for programmes. Therefore, cooperatives are seen to be meaningful in economic development programmes. *"On the programmes, we have set criteria for intake for women and youth; it does not always translate to a big group of female entrepreneurs; the criteria selection on many ED Programmes disadvantages women in those communities '. That is why we intentionally look for cooperatives and start-ups" - Respondent 9*

Enterprise development programmes have specific timeframes, and participants have completed their milestones; there is no further follow through; this is where the industry finds partnering with cooperatives essential in building sustainability in terms of entrepreneurial opportunities within the value chain" *"In the longer, we need to partner with other industries that have absorption because we do not have capacity on the solar farms at the end of the life cycle of procurement cycle for REIPPPP even if the entrepreneurs do not speak to that business it should speak to what the business is currently doing, it could speak to other players in the economy or future pipeline" - Respondent 9.*

4.3.3.5 Market Access

As mentioned throughout the data collection, the renewable energy sector is still in its infancy at just over 10 years old, and the market has shown to have changed over the last 10 years to how power is being procured, mainly through the REIPPPP. Respondent 2 shared the views of these market shifts and areas of opportunity *"We are seeing other market segments open up where it is almost easier for entrepreneurs, whether youth-owned, women-owned, or black-owned, to participate in RE. You are looking at Distributed generation, private PPA's, generation for own use, green hydrogen, and*

many other market segments that provide good opportunities for general and women entrepreneurship."

With these new markets arising in the space, women entrepreneurs have the standard view that their experiences will still lack access; respondent 8 is of the view that. *"Our struggle is not women. Our struggle is still black people having access to this space"*. Respondent 13 supports this notion stating that *"the reality is we continue to be marginalised. "I have to work twice as hard in the energy and renewable energy sector as my male counterparts". "I think if we have more programmes that are intended to develop women in the sector the more, we will create a platform for women to start speaking saying this is where we are, this is what we think. Politics and women riddle the energy sector can also have a voice in terms of "this is how we see things"*.

The other opportunities could be recognised by other women entrepreneurs who view that *"We do not want to play in REIPPPP because it does not make sense now we operate in the private sector working on private PPA's because it makes sense you can have a higher tariff and we have our trading licence so we can participate in that. Selling to the government would be more secure than to private off-takers"* - Respondent 14

Market access is viewed by respondent 13 as more complex than accessing capital as a women-owned business *"I used to think access to capital was the issue, but by challenge has been market access you have to fight to find your place, to knock on this door to be heard" "Give me a market, give me an opportunity" "It took my business partner and me 3 months to secure a meeting with the executives at the Free State Utility. Initially, I sent an email, but the minute I cc'ed a male of stature, someone started to listen to me."*

Respondents 15 and 13 have standard views regarding women's participation in the economy, stating, *"The more women participate in the economy, the better, we are driven, and most of us believe in stability. Therefore, women have better decision-making sense than men. "While it is important to focus on personal development and emotional well-being, we tend to focus too much on that and forget the crux of business; we want to grow, make money, and expand as an entrepreneur. "We focus on the women's internal politics"- Respondent 13*

1.3.4 REIPPPP Enterprise Development Regulatory Frameworks

1.3.4.1 Enterprise Development Finance & Structure

There are different views on how the enterprise development component of REIPPPP is structured. Many respondents find that due to the lack of structure, the enterprise development initiatives are less sustainable and less targeted to ensure women's participation and the stimulation of women entrepreneurship in the REIPPPP. Funding within the REIPPPP, as suggested in the theme on access to working capital, is not a deep-rooted concern. *It is well-funded. It is just not sustainable" - Respondent 1*

Respondent 9 supports Respondent 1 stance on funding *"our problem is not funding. Our problem is structuring so unlike BBBEE, which has three components under ESD, preferential procurement, supplier development and enterprise development, so within the REIPPPP space, ED is the EnD aspect of BBBEE, and because it is not clearly defined, people only do training regardless of the budget for a business is.* Respondent 2 agrees with both views: *"There is no lack of funding, but it needs to be coordinated. We cannot have disbursed efforts, and we need to have the coordinated effort of how we will do this nationally, and through the gender diversity strategy, they are putting those structures in place."*

Enterprise development is well funded by not thought through due to the reliance on reporting and compliance. *"We want to create programmes that can seed to grow beyond the REIPPPP and can operate anywhere" "There is way more funding outside of IPPs than in the IPPs because you're now a catalyst that is our approach" - carrying them long enough to see them take off. We understand the reporting regime that IPPs live in, which can be a constraint, but there are ways to make it work" - Respondent 8*

Enterprise Development in its current state is focused on compliance and meeting the criteria set by implementing partners; however, respondent 16 states that *"we should all have equal opportunities, but ring-fencing certain segments we minimise our impact we should be more inclusive and keep a balance."*

Frameworks for enterprise development do not exist, and therefore, programmes are said to "remain flat" *"The policy around EnD within REIPPPP is blank, unlike BBBEE, there*

are incentives for graduation for ED to SD, incentives for procurement, for early payments in support of local and upcoming businesses" states respondent 9.

The enterprise development with the REIPPPP in itself is not clear *"models are not working because it is not as accessible as possible if you want to attract the right individuals" "it comes down to basic education and awareness programmes, saying this is what the supply chain looks like, here are the opportunities, let us start there" "Why it is not well coordinated or well documented, in the RFP for bid window 5 and 6, we saw a new requirement of 5% women ownership in those projects, who knows the details of that, whose been able actually to find out what it means, that does it mean for a women entrepreneur trying to be that 5% shareholder. It has not given women access to that information, and if you want to access it, you must pay the R25 000 for the bid documents"* - Respondent 2.

Economic development managers are placed in charge of enterprise development budgets respondent 7 states that *"they best intentions at heart but deal with these budgets as charity".* Economic development is meant to be a "multiplier effect"; however, *", programmes being implemented is very, very unlikely and are not thought of at the programme design level."*

4.3.4.2 RE Industry Commitment

In an interview with the CEO of an industry body, it is explained that the Renewable Energy sector has taken bold steps to prioritise gender equality which does not particularly prioritise women entrepreneurship. *As an industry, we have launched the gender diversity working group, which is a joint PV and wind working was launched by Ms Ntombifuthi Ntuli, with the vision of how you incorporate women more along the value chain in RE across the board.* It is said that a study was conducted and will be launched on the current status quo of gender diversity within the sector and where precisely the penetration of women is.

The wind energy sector is looking to produce a charter requesting the industry to commit to gender diversity within the value chain *"we understand at this level of our business, this is the current penetration, and we are committing to a target of this penetration of women going forward"- Respondent 2*

The "DMRE has developed a gender diversity strategy that underpins all gender diversity work from women in leadership positions, women in ownership positions, and entrepreneurship titled "Women Empowerment and Gender Diversity Strategy for the Energy Sector 2021-2025". This strategy document is said to have incorporated all aspects of gender diversity holistically, states respondent 2.

It is further stated by Respondent 2 that "*The support on entrepreneurship is critical, understanding that some IPPs do not have commitments to EnD and they should be focusing on it, especially with women*". However, even though, as previously stated that the RE sector is young, there has been commitment through "*The makeup of the holding companies. You will be amazed how it has changed in the last 4 years. You are now starting to see many CEOs of IPP development companies who are women.*"

Continuous learning is shared by respondents 2 and 16, who state the sector has changed due to the lessons learnt; however, "*They could do a lot more with the enterprise development staff, and the staff never develop themselves in a position due to the ED staff turnover, and they are job hopping looking for better opportunities*". Economic development staff retention is said to be poor when communities get to trust an economic development manager, a few months later, they will see a new face, and it can be assumed that the community will lose faith and trust in the investment into their communities.

Respondent 15 exclaimed that "*you can be gender sensitive and not actively gender preferentially oriented "in your understanding and awareness, but are you, as an RE sector, are you going to be so responsive in the plight of gender and gender equity that you will prioritise that.*"

4.3.4.3 Asset-based community development

Asset-based community development (ABCD) is used by a highly successful PD EPC and Asset Management giant in South Africa. "*Asset Based Community Development puts funds aside for sustainable enterprise development*"- Respondent 5. They believe that through engagement and identification of skills and needs, communities can lead the change in their communities and continue through the support of cooperatives. "*There are women with skills; however, they cannot access capital; those ladies have sewing machines, needlework, beautiful things you can find in shops but do not have the funds to*

expand. We gave them some funds, and their work was exhibited at Windaba 2022". "One of these ladies is teaching kids to knit and sew since it is no longer in the curriculum" "In COVID-19 lockdown, we could identify women entrepreneurs in all four communities, and we got the brand material, and they made up to 10 000 masks to give out where we bought these masks from them, and we would not know who they are if we did not do the ABCD programme". "We started food gardens in lockdown, and we have 50 food gardens and have been incorporated into classrooms in a creche"- Respondent 5

A cooperative that they are working within 4 communities in the Northern Cape & Eastern Cape mentions that when it comes to *"M&E and R, we develop people from the community that know the community and the projects that are taking place where they do the data collection, they consolidate the data, they do the interpretation of the data as well as the reports which we verify and pass onto our mining and renewable energy clients". In Kagnas 100 % female of colour, in Noupoort 4 females and 1 male in Loeriesfontein 2 males 3 females in Perdekraal 3 males 6 females all of the colour".*

Respondent 5 was clear that a company can steer the transformation agenda by prioritising communities and women. *We make a concerted effort in our company and our shareholders, and we have a big drive to focus on women and women entrepreneurs; all our interventions must have a gender lens, to the extent that in some of the communities, you have many very active women."*

4.3.5 Women Entrepreneurship

4.3.5.3 Women's Accessibility to Working Capital

Women entrepreneurs in the informal sector battle with financial skills. "Yes, historically in our country, we do not always have women that have bank accounts and are financially savvy". "You will find people who have little businesses, making an income, living hand to mouth, so there is no record of transactions". They find it challenging to draft proposals as "they have no record of what they have done, sold, income received to justify the application, so it is hard.". They also do not have access to networks because "grant funding and SED support even government programmes, a lot of it is around networks and do they have access to it" "Access to just going to the right place to apply for access to funds is also a challenge" - Respondent 10.

Access to working capital is a common theme that was dominant by most respondents. Respondent 2 stated, *"It is hard for South Africans to access money, and it is hard for people of colour to access money, and it could be a historical issue" "The financial sector purely looks at bankability whether or not it is a male or female"*. Funders look for specific criteria such as the risk profile and existing capital. *"Most funders look for collateral or a certain percentage that you must contribute" "Some of us have never been entrepreneurs before, and it is taking forever to get funding or support"- Respondent 15* and it is for this reason that entrepreneurs feel as *"For as long as you have not earmarked funding specifically to women you are biased towards women because the more you are mainstreaming women you are not only broadening the economy but your participating will not be skewed towards males only we will come closer to what we want as a society that is balanced, that is gender sensitive and responsive to women entrepreneurs."*

For example, if you a micro-entrepreneur wanting to do the civil works for IPP funders, look at guarantees to workmanship *"A micro-entrepreneur cannot do civils for a 13 square kilometres long wind or solar farm, maybe a Medium enterprise trading at 35-50 million a year but not one that's trading at R500 000-R600 000 per year. - Respondent 11.* Respondent 12 states, *"Financial Capital is the lifeline of enterprise development."*

Women's risk profile is higher than that of their male counterparts, which affects their ability to get access to working capital. *"At the Windaba, I heard a banker say bankers work on risk and take a risk view on people" "It is a fact, and it is wrong, but it is a fact"- Respondent 8.* Women's participation in formal entrepreneurship needs to be better represented because they cannot access capital. *"My female sisters in the financial services workstreams will say that in the 2022 year to date, female entrepreneurs have only accessed about 7% of the total capital distributed in Africa. Female participation is broadened to include female founders, female lead management teams and high female representation in executives"* Respondent 7 supports this notion stating that *"financial markets seem to deem women as a financial risk, which is a fallacy looking at the repayment rate which is a structural imbalance that needs to be addressed. It is addressed, but it does not seem to be shifting."*

An entrepreneur shares her story of participating in REIPPPP bid window 6 *"Funding is the biggest issue; we could not take part in round 6 because 90% is based on price and the cost of funding locally is so expensive. Foreign companies get cheap funding and want to bid at 40c per kw/h. How must we earn an income? So, we went to the IPPO to complain, stating to them that we are the company you wanted to create having local entrants. However, we cannot participate in your great programme because it was created for foreign entities. After all, they are chasing price 1) Funding is expensive 2) If you do not have funding for shareholding and you will get the funding, but you will pay 18 years and how will you survive for 18 years, so you have to look for alternative employment like consulting. This is why you see the same old players winning because you cannot be competitive"*- Respondent 14.

This viewpoint is supported by respondent 7, who states, *"In the REIPPPP rounds for BBBEE participation, companies that are led by women, which are a handful, have been side-lined and unable to access capital so much so that a female that has developed over 2GW which is significant. They lost out capital to brand new 8-month-old non-women-led businesses.*

Professionals in the space commonly state that access to finance is not a significant challenge *"there is a ton of money in South Africa looking for a place to go and work, but no one qualifies for that money, and there is no working capital out there". - Respondent 11.* In BBBEE requirements, every company would say that they have a significant need for female black-owned entrepreneurs *"access to capital becomes a problem because women do not get financial backing to scale their businesses necessary in the RE sector" - respondent 7.*

There are perceptions around **deal-making** in access to working capital *"women-Business owners make deals across dinner tables all the time, but if it is a woman or black person, it is corruption" "These kinds of perceptions need to be shifted"*- Respondent 7

Access to information around accessing capital is said by economic development professionals, which is said to be shared on social media and via business forums *"we have runners as we recognise those who do not have access to digital platforms -*

Respondent 16. Women use conferences and workshop platforms to get access to information about accessing working capital. "You only find out about funding opportunities you attended a conference at the end of the year, so it is not as easy to get information"- Respondent 15

Venture Capital is familiar with the sector, and there are incubators and accelerator programs in the renewable energy space. *"WomHub launched a fund called 535 for female founders in technical sectors. They run incubation and acceleration programmes and have their venture capital fund. MettaCapital private equity prioritises female participation but funds anyone in the RE space. KnowledgePele also raises an investment fund for enterprise development as part of their economic development."*

4.3.5.2 Gender Stereotypes

Due to South Africa's historical imbalance, gender stereotypes continue to persist, especially in a sector which has provided clear intentions to be inclusive of women in procurement, market access and executive leadership. However, women viewed 6 respondents that gender stereotypes still exist *"Women are practical and are very nurturing. We tend to get ahead quicker because we need to get things done and are driven by supporting our family. Therefore, they are quicker to get to the endpoint"- Respondent 16* further mentions, *"Not everyone is an entrepreneur. There is a small pool in our country that are entrepreneurial. We make it smaller but exclusionary based on race and gender."*

Women's entrepreneurial intent is not to grow scalable businesses and be competitive in the market alongside their male counterparts but to grow and support their families and commit to their care responsibilities.

An implementing IPP conducted research at the University of the Free State, and their findings suggest that *"women are ok with being at home, but then, on the other hand, you see women flourish in the bigger communities which are not as rural"- Respondent 5*

It is therefore encouraged, and views are dominated by all participants around stimulating the entrepreneurial environment for women because *"the role of women is completely undervalued economically, women take care of kids in the way that they do, their households in the way that they do and women miss out on career development when you*

are on maternity leave, and a man may get opportunities in that time"-Respondent 8. This contributes to the growth of gender inequality.

4.3.5.3 Collectives

A new theme within the sector, which is aimed at supporting gender equality and women's economic empowerment. *"Women are mobilisers", states respondent 9. Respondent 7 agrees that "I know my career as a non-white female would not have gotten to where it got if it had not been for key instrumental people". "If I had not had those 5 or 6 people that invited me into the room at the right time, none of it would have mattered." Because of those 5 or 6 key introductions, I have a level of social dexterity that I would not otherwise have had.*

WeConnect Renewable Energy South Africa is a women's network founded by female executives in the renewable energy sector. The main objective is explained in section 3.5.1. The Director of the network shares that *"As a non-white female too, I would not have gotten to where I have got if it had not been for key instrumental people" The intention in WeConnect is strategic, like alliance building with people with lesser social dexterity and people with more social dexterity in RE space precisely so that the women mentees have the key access points into the space, that is why WeConnect exists.*

There are social capital opportunities that can be derived from having access to these networks *"When we have a group of just women, then we seem to speak far broader about life, in general, supporting each other and women form little networks and there are deeper talks, and that says that they need this to make them feel like they are not alone"- Respondent 16.*

Respondents mentioned that men in the communities mainly chair business forums *"the female is hardly the chair, and the female is the secretary taking the minutes. Females are excluded from what I have seen"- Respondent 1.* It is viewed that since men chair these forums, women entrepreneurs need access to information and decision-making. *"Many men in the private sector do things together, having a business discussion by the time you get into a meeting on a Monday, the men have already discussed and decided outside of the boardroom" "Women meet on social levels, but as we meet for this they meet by default for business"-Respondent, 15*

4.3.5.4 Mentorship

Mentorship within the enterprise development sphere, is seen as a two-part approach: the programme and that. *"People's attitude and engagement deliver better results"- Respondent 2*. The programmes are said to have high dropout rates due to the orientation and mindset of the individuals.

It is viewed as beneficial by respondent 9 to have a targeted approach to enterprise development programming for women entrepreneurs in order to be considerate, as they have found that "programmes are not conscious of the dynamics of the genders and the women in that space as well as the historical context of the area that you are working in the programme will use a 'man's language' to teach women."

Women entrepreneurs find it of great value to have an industry participating mentor *"I wanted to learn from a real project, and I used to visit a round 1 project, and the ED manager became a mentor to me"- Respondent 12*, which is a standard view by respondent 13 *"It is great to have a mentor which comes from industry to help me with my technical skills and knowledge."*

Mentorship has a real impact on empowering women for economic and financial freedom. *"You would find women start something and do not finish due to additional burden of child-rearing and looking after households"- Respondent 6*

The RE implementing agents prioritise WEE in the following ways: *"If we are going to give money, there has to be a woman in the household because the money is going to circulate" – Respondent 8*. They have also started to view ECD centres as entities *"because in the urban area, the day-care is a business, they are making money. We are teaching them formalising, financial management, scaling"- Respondent 9*

4.3.5.5 Women's Economic Empowerment

"Empowerment is being able to make decisions in changing a system. It is not just about giving a grant or access to skills empowerment its ownership"- Respondent 1

Women's entrepreneurship within the informal sector of REIPPPP is defined as *"entrepreneurs in the remote and rural communities; female entrepreneurs are ECD owners, caterers and seamstresses, not what we would put on a programme as defined by*

our implementing partners that we may use in this space"- Respondent 9. As described in the section on collectives, particularly in business forums "they only call the women if there is a contract for cleaning and catering". They are also classified as "grassroots organisations."

4.3.5.6 Women and Society

It was viewed by many participants that women contribute to society in a positive way based on their business success and that working alongside women is an asset to understanding community needs and making an impact as *"Stereotypically women are more approachable than men in terms of coalescing and get people to do things together women are almost naturally more effective at that" - Respondent 8. In addition, women are seen as remarkable at coalition and alliance building, making it critical to include them. "An empowered woman empowers her community" Respondent 9.*

Women entrepreneurs are motivated by the benefit and positive influence they can bring to their families. In addition, they are empowered by other strong female figures in their communities *"If you take it back to the basics as a black woman, black female that comes from HD, historically disadvantaged, we know how influential our grandmothers were, our mother, our teachers at our primary school"- Respondent 13.*

Women entrepreneurs start their business journeys to bring change into the communities. *"I started my business from my handbag, doing something different for the community that I come from to make a difference"- Respondent 12. It is then supported and a standard view that women's financial gain will be reinvested into the community. "You give the grant to the women, the children will benefit" "What they are learning is taken back into the home"- Respondent 6 and is supported by Respondent 2, who states that "With a women entrepreneur, you will see more family orientation and lifting those around her than you would a male."*

Due to the motivation of their need to care for their families, they are often underrated and less empowered. However, that main element makes them succeed above their male counterparts. *"Even within your business or business and people do not believe much or have confidence in your as a businesswoman, women are naturally nurtured, and one thing that makes them successful is their ability to nurture communities" "Therefore,*

women community builders are more successful than men community builders, women care about their social well-being and can build trust" Respondent 13.

Women are viewed as great fits for economic development. As an entrepreneur shares a story about her mother-in-law, who intended to uplift the community and saw an opportunity yet failed to view herself as an entrepreneur. *"My mother-in-law knows if there is no food, she knows the community will disintegrate; therefore, when she retired, she started a food kitchen. Therefore, it was easy for the community to trust and believe in her"- Respondent 15*

The study proves that based on the findings and discussions held with participants that motherhood which consists of house and family indeed should be a consideration in women entrepreneurship and that this factor plays a huge role in the success of women owned ventures compared to those by men. The findings also suggest that macro and meso environments such as gender responsive enterprise development policies and socio-cultural factors creates an enabling environment for entrepreneurial activity by women (Dopfer et al., 2004; Pitelis, 2005, Brush, 2009).

4.4 Conclusion

This chapter reflected the findings from the data collected using an interpretivist research paradigm and using thematic analysis to code and identify key themes. The themes will be discussed in the discussion chapter, followed by recommendations based on the propositions for this research study.

CHAPTER 5: DISCUSSION OF RESULTS

5.1 Introduction

The findings produced in the previous chapter will be discussed in this chapter based on the data collected and the key thematic areas listed in chapter 4. This chapter summarises the key findings that have emerged as they relate to the research questions and how they relate to the propositions for this research.

5.2 Participants Demographics

The interviewees who participated comprised industry professionals and 7 women entrepreneurs who are independently operating their businesses in the renewable energy sector. Table 3 below describes the participants' demographics, noting that these established entrepreneurs are implementing within the formal economy rather than, as the study suggested, exploring informal entrepreneurs as beneficiaries of REIPPPP ED funds. Women entrepreneurs scaling in the formal economy have tertiary education; most have postgraduate and working experience. They describe that initiating their businesses started from their own pockets as they relied on personal finances to establish their businesses. Credibility for two of these businesses is strengthened through partnerships with their co-founders, who are male, to provide further resources such as technical acumen, financial capital as well as social capital.

5.3 Propositions Discussion

The purpose of this research was to provide the renewable energy sector with propositions to stimulate women entrepreneurship through enterprise development in the REIPPPP. The study participants were selected based on their experience in ED in the sector. The women entrepreneurs were meant to represent the informal economy, to which many implementing economic development professionals could respond. Data was also collected from start-ups in the renewable energy sector owned by women to interpret ED from their perspective in the sector and interpret criteria, regulations and gender equality.

5.3.1 Discussion of proposition 1: Enterprise Development criteria contribute to women's economic empowerment and 'growthiness' for entrepreneurial ventures.

The findings suggest that given that the renewable energy sector is new, transformation is evident in the leadership of executives at IPPs however, the structure of enterprise development has not been "thought through". Due to the lack of structure, the data collected proved a strong relationship between criteria and compliance and less structure and impact. The lack of a clear structure of the ED programmes is a limiting factor for the impact and improvement of women's participation in the entrepreneurship ecosystem. Therefore, criteria strongly associated with compliance are unprogressively for economic development. Development agencies prioritise their enterprise development commitments by remaining compliant. If women's entrepreneurship is not on the agenda as an area of prioritisation to that extent, very little targeted support will be provided to women entrepreneurs.

Even though the BBBEE mandate ensures women's participation, it is another form of compliance. It could disadvantage women-owned businesses as they will not meet any of the requirements of a sustainable business model. Criteria within the REIPPPP are also viewed as a barrier to market entry by women-owned businesses, as local entities cannot compete with international competitors given the high costs of interest on development finance and access to bidding documents. This aligns with the theory by Bruton et al., 2021. Businesses are limited due to the high transaction costs and opportunism exploited by international players in the formal economy. His theories further support that informal protocol should be established for business operations within the informal economy.

Bidders identify enterprises to receive contributions and to what extent it supports black-owned businesses (Eberhard & Naude, 2016, p. 118). The findings suggest that implementing agents such as economic development professionals are tasked to assist and report every quarter using an EnD Annexure B compliance form (SAWEA & SAPVIA, 2020). ED professionals experience challenges through their community needs assessment with the kinds of services women can contribute to the sector. Findings from the data collection process referred to job creation, local content, ownership, management control, preferential procurement, enterprise, and socio-economic development, which are all seven non-price categories (Eberhard & Naude, 2017, p. 24).

Effectiveness is associated with the periodic reporting requirements ensuring enterprise development-supported initiatives' accountability. The extent to which social performance concerning enterprise development for the inclusion of women-owned enterprises is not monitored and evaluated efficiently, and the process has not been structured and streamlined.

According to respondents, women have a high-risk profile and are less likely to gain access to capital as quickly as men. It is challenging to scale businesses with very little financial Acumen, and the likelihood of producing a business that is investor ready seems far within their reach. The well-established women-owned enterprises find it easy to access.

5.3.2 Discussion of proposition 2: Incubation and Acceleration programmes in the REIPPPP benefit the national programme and women's economic empowerment.

Various incubator and accelerator programmes operate within the renewable energy sector, either focused on businesses still in ideation or early-stage revenue, offering basic business skills as training. Enterprises in the acceleration programmes generate revenues between R40 000 and R500 000 per month. They assist these micro enterprises with supporting their back-end systems from a compelling operational perspective focused on information technology, marketing and human resources. There is a relationship between participating in enterprise development programmes and market access and market networks for those businesses to scale and be sustainable (McAdam et al., 2019).

Enterprise development programmes are unsuccessful if entrants drop out due to a lack of technical vocational training in their business and the lack of financial acumen required to supply resources. There is excellent value in longer-term approaches to enterprise development programmes, as sustainability cannot be guaranteed through a lightweight approach to scaling. As Mao (2009) states, we should recognise enterprise growth over a long period. Findings show that micro-enterprises need continued support for at least 36 months through all human, social and financial capital support elements.

Incubators in the renewable energy sector have laid the foundation for entrepreneurship education (Venter & Urban, 2019) suggest. Skills development and training solutions are prevalent as an approach to enterprise development that does not provide a holistic

mechanism in support of a resource-based approach required for sustainable enterprise development as interpreted for this study. Enterprise development has yet to be structured and thought through in the REIPPPP, the small budget allocation sees this towards enterprise development, which is not sufficient to stimulate the entrepreneurial ecosystem, especially for women entrepreneurs. A structured resource-based view is necessary for enterprises to reach a competitive advantage in the market and scale sustainably (Greve, 2021).

Skills development is critical for capacity building which most respondents felt is necessary for women entrepreneurs entering the sector. Human capital, such as education, knowledge and experience, has been stimulated through ED in the REIPPPP to create opportunities and for communities to capitalise on it (Simpeh, 2011). If we continue to exclude women as a country, we are not operating optimally. The findings suggest narratives about how enterprise development is understood within the sector and directly affects the implementation, justifying the work (Venter & Urban, 2019) that cognitive abilities affect productivity and efficiency.

There is a call to shift away from the narratives around the relationship of understanding between enterprise development and community development. If the two concepts were broadly understood, then the benefits of women's economic participation would greatly benefit the economy. Participation will be stimulated.

Due to the historical traditions and country contexts of women's positioning in society, the study suggests that bespoke programmes designed for women in "their language" could be a significant value-add to encouraging women in entrepreneurship. This suggests that women's empowerment is a great tool but that no blind eye should be turned to women who want to drive profits and be competitive in the market.

Partnerships through community-based development agencies are presented in findings as a positive attribute to achieving sustainability for enterprises given the nature of the short-term offering to enterprise development as skills development and training. Respondents support the work they have been doing collectively alongside development support agencies such as cooperatives to broaden the impact due to limited budget and support collective initiatives with their ED spend. The findings on collective initiatives share the model of "embeddedness" through the coexistence and interaction of

entrepreneurs with other actors within a community or country (Ngoasong & Kimbu, 2019, p. 41).

Most of the women entrepreneurs' participants started their businesses from personal finance, one of the financing methods (Venter & Urban, 2019). Their businesses are successful due to targeted social impact, as financial capital has limited influence on whether their business will succeed. Financial capital is excellent for growth but is not essential (Venter & Urban, 2019; Simpeh, 2011). Market access is more challenging than working capital.

5.3.3 Discussion of proposition 3: The REIPPPP, through responsive ED policy for women, can encourage entrepreneurship by women and promote women's economic empowerment.

A dominant view by women entrepreneurs who participated in this study was that market entry and access to capital are two barriers' women face in the ecosystem. This is the view even though there are frameworks such as the BBBEE preferential procurement policy and the latest state compliance with the President's 40% procurement allocation. This allocation is due to the year-on-year spent by the department of Mineral Resources and Energy; they are Experiencing a decline of 2% during 2020/2021 for black-women-owned businesses (Commission for Gender Equality, 2022). This spending is meagre if we require and consider fluidity, population flux, labour market change and firm growth, according to McAdam et al. (2019), the four domains for inclusive entrepreneurial ecosystems. There remains a positive relationship between BBBEE and policy and women's empowerment through entrepreneurship in this study (Adendorff, 2020); however, it negatively impacts women entrepreneurs from the perspectives of criteria, transparency, monitoring, and evaluation.

Women entrepreneurs operating in construction in the renewable energy sector experience gender bias and challenging terrain regarding authority. This can negatively impact the retention of women entrepreneurs in construction in the sector and further supports the theory of McAdam et al. (2019) and the 'glass-wall/ ceiling' effects which reduce women's participation and contribution to entrepreneurial activity in the renewable energy sector.

According to the respondents, financial capital is substantial within the sector. However, the requirements are hard to reach if micro-enterprises cannot access existing working capital or prove compliance. Findings show that there are individuals who know how to obtain grant funding for entrepreneurship and will apply at various IPPs; this supports the notion by Clausen (2006) and Simpeh (2011) that new ventures are created when there is access to financial capital and therefore have the resources to exploit opportunities (Clausen, 2006; Simpeh, 2011)

Grant funding has left a negative impact through corruption, as there is no monitoring and evaluation on that grantee and no accountability for the fund's; therefore, this research supports the theory by Bruton et al., (2021) that inclusive instructions are necessary to improve economic equality through government policies which enable opportunities for women entrepreneurs operating in the informal economy. This will also eliminate possibilities for corruption.

Enterprise development needs to be more coordinated and specifically target women entrepreneurs and women's participation as it should for economic equality. Economic development through enterprise development is meant to multiply opportunity and wealth over time. However, ED funds are not used on programmes that have been well thought out from the onset at the design stage. Enterprise Development needs structure and therefore is specifically targeted to women entrepreneurs and is unsustainable over a more extended period.

There are no existing policies or frameworks which incentivise procurement for women-owned businesses. Even though 5% shareholding by women is a requirement in the bidding rounds 5 and 6 of the REIPPPP, there needs to be detail as to what that entails for the women entrepreneur with that shareholding. There is a positive relationship between incentivised procurement and social enterprises in the informal sector and achieving an advantage through collective identity (Bruton et al., 2021)

There is a positive relationship between what the UNDP suggests by reshaping policy for women and girls to become catalysts to drive change and to be seen as equal to their male counterparts. Through The Department of Mineral Resources and Energy Women

Empowerment and Gender Equality (WEGE) Policy which is meant to provide “guidance in the development of procedures and practices ensuring equal rights, opportunities and economic empowerment for South African Women in the energy sector” (Moyo & Dhliwayo, 2019, p. 257; Department of Mineral Resources & Energy, 2021).

In this research report it is proven that social, cultural and institutional frameworks have a significant impact on how women understand opportunities and the way they can be exploited. The study shares the views on entrepreneurship in the renewable energy sector whereby males dominate resources and decision-making powers, which has an indirect and direct effect on women’s entrepreneurial activity (Brush, 2009)

5.3.4 Discussion of proposition 4: The REIPPPP through ED for women entrepreneurship can contribute to Sustainable Development Goal 5- Gender Equality.

The entrepreneurial orientation of many informal entrepreneurs is out of necessity, having the means to survive by being self-sufficient; due to low levels of education and experience, their ability to seek employment is limited, and many remain unemployed (Venter & Urban, 2019).

There is a positive relationship between asset-based community development (ABCD) and entrepreneurship ecosystems. Due to the interconnectivity, it reinforces and facilitates innovation and the growth of new ventures (GEM, 2018).

As a means of prioritising and investing in women's economic empowerment and gender equality, asset-based community development (ABCD) is used to drive ownership by the community. Through a rigorous process of a community needs analysis by identifying skills and existing resources to create an ecosystem and value chain for the communities to enter and sustain. This is an approach to promote women in 4 communities in the Northern and Eastern Cape through skills in sewing and needlework. These businesses are operating on a diminutive size, are less capital intensive and are less dynamic than businesses by men, as stated by (Urban & Msimango-Galawe, 2020; Ngoasong & Kimbu, 2019: 41).

Representation of women in the formal economy to an extent, has transformed. There are now more female CEOs at IPPs and executive leadership positions. At the community level where enterprise development initiatives are being implemented, women who are in

operation locally share narratives that they need access to first-hand information. When they do, deal-making from a female's perspective is questioned. Women, therefore, also are less likely to participate in a male-dominated environment due to stereotypes and discrimination (GEM, 2018). Most women entrepreneurs in the informal economy operate in childcare services, crafts such as needlework and sewing, catering, security, cleaning and laundry services.

The renewable energy market is expanding beyond the REIPPPP. It will see other market segments contributing to renewables; however, women entrepreneurs share sentiments that even so, they have proven themselves far and beyond their male counterparts and are not assured that these opportunities will be targeted to women's participation. Women entrepreneurs active in the formal economy with experience and education can identify these opportunities; human capital should be encouraged in the informal economy to support entrepreneurial activity in these markets (Venter & Urban, 2019).

Gender equality in women's entrepreneurship is prioritised to the extent that the current economic development manager has earmarked that as a focus area. This threatens the sustainability of enterprise development initiatives for women as the staff turnover in the renewable energy sector is high and unsustainable from an economic and community development perspective.

Women participants shared the standard view that they are driven by the improvement of their family and broader society; therefore, these opportunities are not taken lightly, and women are likely to employ others to create change within the community (GEM, 2018). Women meaningfully optimise opportunities presented, given access to the market and support to ensure their participation in the renewable energy ecosystem.

Gender stereotypes are a dominant theme and exist due to current historical imbalances of how women are seen equally and to what extent they have access to the same opportunities given the fact that women in the informal economy, such as the areas where IPPs are located, have very little education or knowledge about what is available to them. This pleads a perfect case for implementation partners such as grassroots development agencies to assist in the sustainability of women-owned ventures supported through

enterprise development programmes. It is therefore said that many are sensitive to issues of gender but may not be gender orientated in how it is prioritised; awareness is necessary to change the status quo for women entrepreneurs to be successful.

Women are said to be natural at coalescing and have since established meaningful networking groups through their collective identity within the communities and the renewable energy sector, which men dominate. Through these networks, a form of social capital, women participants express how integral key individuals and social circles have played a role in their growth within the sector through their current level of social dexterity. Simpeh (2011: p. 5) agrees that “Social ties could provide and facilitate resource acquisitions as well as enhance possibilities of opportunity exploitation”; as well as assist with troubleshooting and solving problems.

In every case, business forums at a community level are explained to be chaired by a male and only allow women into those social spaces for lower-end services such as catering or cleaning opportunities.

Mentorship is valued when women entrepreneurs can learn from experienced female leaders and mentors at the project level. Women who feel empowered empower their community. This statement was shared by respondents as well as the impact of investments women make through their economic upliftment. Successful women also serve as role models in communities to other women and girls. However, women battle with care work such as childcare and domestic responsibilities due to norms of the women's role to care for and nurture their families. It contributes to women's risk profile being higher than that of a male. The gender imbalances of South Africa further divide women from entering male-dominated sectors. It is then stated by respondent 7 that *“The world of work was not created for women; the world of economic participation was not created for women”* *“Theoretically, in an economic paradigm, the market forces. “If it were designed for women, we would consider it great to have maternity leave, but where do we pump our breasts? I for sure do not what to pump in the toilet.”*

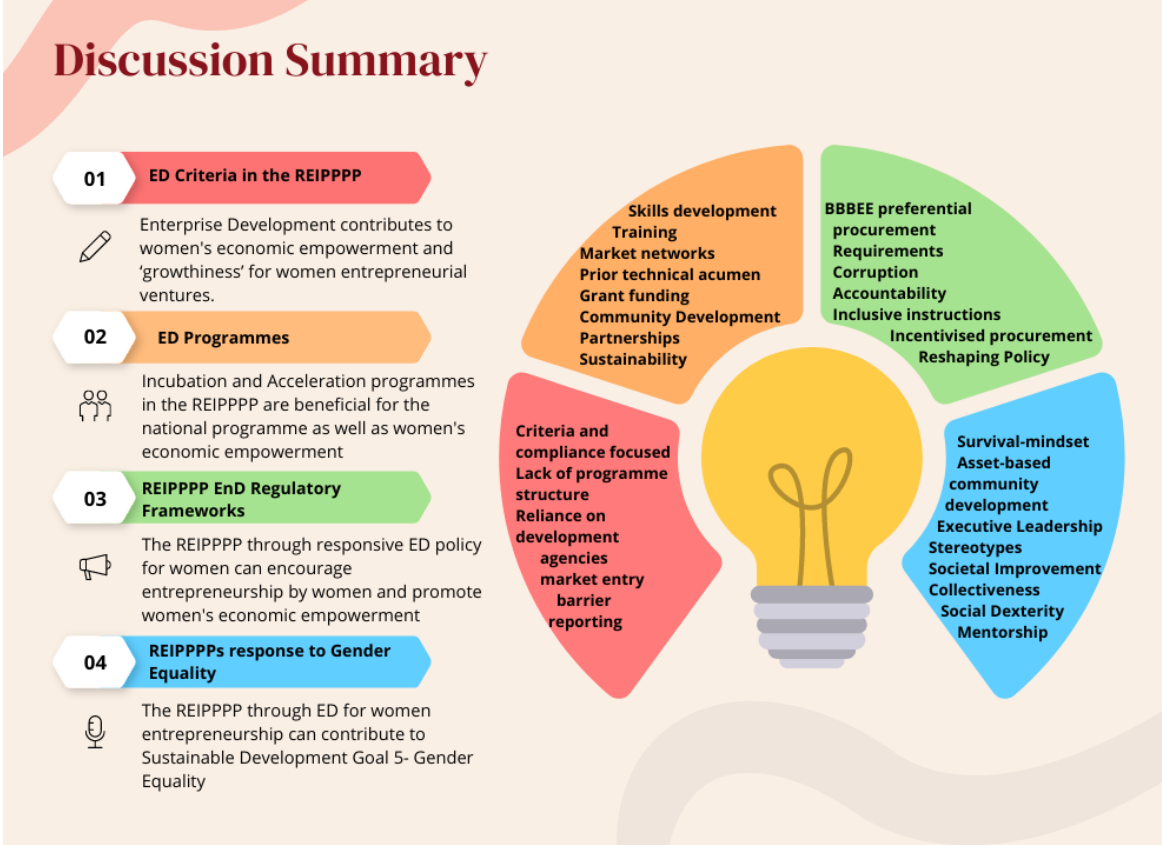


Figure 4: Discussion and Proposition Summary

5.5 Propositions summarised.

The research study aimed to propose four propositions respectively; 1) Enterprise Development criteria contribute to women's economic empowerment and 'growthiness' for entrepreneurial ventures; 2) Incubation and Acceleration programmes in the REIPPPP benefit the national programme and women's economic empowerment; 3) The REIPPPP, through responsive ED policy for women, can encourage entrepreneurship by women and promote women's economic empowerment and 4) The REIPPPP through ED for women entrepreneurship can contribute to Sustainable Development Goal 5- Gender Equality.

Proposition 1) A positive relationship exists between incentivised procurement and social enterprises in the informal sector and achieving an advantage through collective identity.

Proposition 2a) There is a positive relationship between enterprise development and women's entrepreneurship through human capital, social capital and financial capital.

Proposition 2b) There is a positive relationship between community-based development agencies and business sustainability.

Proposition 2c) There is a positive relationship between asset-based community development (ABCD) and entrepreneurship ecosystems.

Proposition 3: There remains a positive relationship between BBBEE and policy and women's empowerment through entrepreneurship. However, the criteria are limited due to a lack of transparency, monitoring, and evaluation.

Proposition 4: A positive relationship exists between policy and women empowerment and gender equality.

5.6 Implications

This section provides an overview of the conversation between the literature used to support this research study and the data provided in Chapter 4 findings. This section aims to state how the findings relate to the existing literature covered in Chapter 1 and Chapter 2.

5.6.1 Research Implications

South African historical imbalances directly affect women entrepreneurship, especially in the informal sector. Women are faced with traditional gender stereotypes and discrimination. Innovation localised solutions need to be investigated for enterprise development design. The economy must harness women entrepreneurs' talent and skills to solve economic challenges such as access to the market and gender equality (OCED, 2016).

If we are not creating space for women entrepreneurs in the ecosystem, we are not operating at our total capacity as a country; this supports the research by (Kelley et al., 2017; World Bank, 2018; Urban & Msimango-Galawe, 2020) that women have a critical role to play in economic growth. The findings further contribute to the research by Urban and Msimango-Galawe, 2020; women entrepreneurs find value in female role models focused on business orientation networks with their communities and ecosystems. Due to women's lack of capability and status in society, this view further supports the findings that women in the informal economy are challenged in seeking working capital.

Adjacent to the research by Bowmaker-Falconer and Herrington (2020), female-owned businesses share a commonality in the type of services and businesses they have focused on crafts, needlework, catering, cleaning, and laundry services. All of these services host fewer employees and do not have high turnovers. South Africa's economic divide between men and women is seen in these findings, where women entrepreneurs in informal economies have less access to resources (Bruton et al., 2021), and their role in society is undervalued (McAdam et al., 2019). This directly impacts the lack of human capital and traditional gender norms.

Cognitive institutions are more critical for developing women entrepreneurs than political institutions that regulate or create criteria for inclusivity (Urban & Msimango-Galawe, 2020). Women require entrepreneurial skills related to human capital, benefitting preparedness for financial investment.

Women entrepreneurs find mentors within the sector critical to their social dexterity, gaining relationships and networks from which an individual can derive institutional support and entail the actual and potential resources (Venter & Urban, 2019, p. 99).

Because of their domestic responsibilities, they are driven to strive to balance, manage and control different situations as they improve their economic livelihoods (Urban & Msimango-Galawe, 2020). Women share the standard view that they are driven by the improvement of their families and broader society; therefore, these opportunities are not taken lightly. They will meaningfully optimise presented opportunities, given access to the market and support to ensure their participation in the renewable energy ecosystem. This mindset is an opportunity for women. Therefore, mentorship is valuable for women's empowerment and resilience for economic participation.

Gender stereotypes hinder women from becoming entrepreneurs and participating in the South African economy, and the findings are no different to the renewable energy sector. The sector is mainly male-dominated, and therefore opportunities for women entrants are challenging due to the need for more knowledge about the sector and more social capital. Women entrepreneurs in the informal sector, thus, need to be made aware of the available opportunities. This implication contributes to (OCED, 2016) the challenges women face, such as social and cultural discrimination, lack of entrepreneurial skills, and their battle to find finance. They have low social capital and policies supporting women entrepreneurs, discouraging women from choosing entrepreneurship as a career path.

5.6.2 Policy Implications

Goh & Loosemore (2017) states that resource-based theory is essential to understand what adequate resources are necessary. The findings suggest that human capital is given in abundance. However, access to financial capital and social capital still needs improvement. Financial capital has a positive relationship to access to the market, and

women-owned businesses find it challenging to enter the market given their gender risk profile and the expensive loan rates, which deters their participation in the market.

South African Renewable Energy Business Incubator (SAREBI) describes the challenges of creating enterprise development initiatives, that they depend not only on resources but also on capabilities such as technical vocational ability in this sector (Alvarez & Busenitz, 2001).

The Economic Development (ED) scorecard aligns with the Amended BBBEE Codes of Good Practice. Economic development (ED) and Socio-Economic Development (SED) contribute 7-10%. This minimal number proves that REIPPPP has yet to respond to local entrepreneurship, which could stimulate the South African economy and promote sustainable livelihoods, including creating ecosystems for women-owned businesses. The findings contribute to (Eberhard & Naude 2017) that the ED scorecard establishes the combined contribution to ED using a percentage of revenue as an adjusted percentage for local enterprises.

Programmes initiated are considered sensitive to gender but not gender orientated in how it is prioritised. Awareness is necessary to change the status quo for women entrepreneurs to be successful; inclusive instructions can level the playing field, increase opportunity and eliminate corruption (Bruton et al., 2021).

Unstructured enterprise development design has seen IPPs provide funding, purchasing vehicles, and giving seed funding, which does not benefit the businesses but creates an unhealthy expectation environment in the community. Innovation is required in programme design and due diligence to foster ecosystems for women entrepreneurs.

5.6.3 Professional Implications

The renewable energy sector battles to find long-term value in its enterprise development initiatives due to women's need for more awareness of pre-existing skills within the informal economy. It is unknown; the value they could add to the market (Goh & Loosemore, 2017). Understanding community needs and identifying skills are socially complex, since investment requires monetary returns on investment. Defining the economic value to investors is socially complex. Exploring market segments where

informal women entrepreneurs can thrive and create targeted programmes would be further beneficial.

Structural economic challenges continue, as evident in the renewable energy sector, and structural economic challenges continue that women lack entrepreneurial skills. Entrepreneurship is a means of survival based on domestic responsibility and limited capabilities due to a lack of education (Urban & Msimango-Galawe, 2020). It is then agreed that due to the traditional stereotypes and narratives, women find opportunities in domestic functions.

Long-term sustainability is necessary for enterprise “growthiness”, ensuring sustainable growth over time. It requires a long-term approach to how ED initiatives are structured from the conceptual design (Mao, 2009). Human capital expanding training and development initiatives to the industry would assist ED professionals responsible for these budgets to understand the concept of sustainability from an ED perspective, that any investment is supposed to have a multiplier effect.

There are successes in development agencies such as implementation partners such as grassroots development agencies to assist in the sustainability of women-owned ventures supported through enterprise development programmes. This contributes to community embeddedness (Ngoasong & Kimbu, 2019, p. 41).

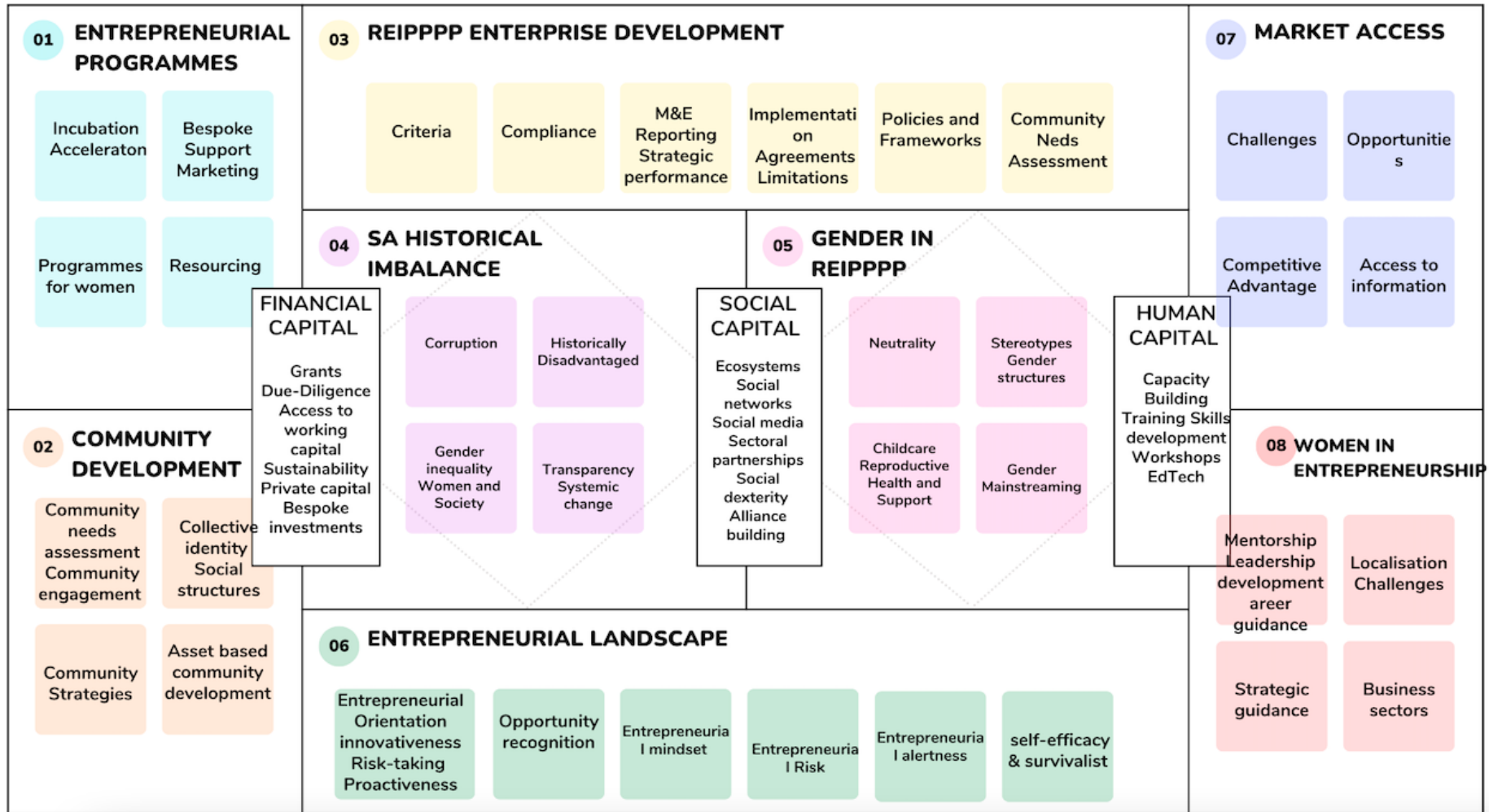


Figure 5: Coding and Thematic Framework

5.7 Limitations

- 5.7.1 This research focused on women-owned enterprises relevant to investigating enterprise development in the REIPPPP. The study aimed to collect data from participants who are viewed as beneficiaries of ED funding.
- 5.7.2 The common identities willing to participate in the study were economic development managers of IPPs. Due to access to information on community beneficiaries, they should be unable to expand the study into rural communities where IPPs are based.
- 5.7.3 The period for data collection limited participation by others and the time limitation being able to fit into the schedules of high-ranked executives or officials. Participants were also less likely to provide access to information regarding beneficiaries of the REIPPPP as project information remains the property of their respective companies.
- 5.7.4 Interviews took place virtually; in-person interviews would have allowed for a different human approach, and the researcher would have been able to probe more insights based on their experiences.
- 5.7.5 There are limited existing research on entrepreneurship in the renewable energy sector, including women entrepreneurship within the sector. This study contributes to the pre-existing knowledge on women's entrepreneurship but proves that women's entrepreneurship is supported nearly enough to improve gender equality outcomes and equal access to opportunity.
- 5.7.6 External validity in terms of generalisations can be questioned due to a small sample or a case; therefore, the requested participants were able to bring forth existing theories from their sectors to this investigative study, in that case, is respondent validation.

5.8 Conclusion

The renewable energy sector comprising wind and solar industry bodies has committed to producing a charter to commit to gender diversity within the value chain. This is evident that given that the industry is still in its infancy, gender is being prioritised under the complexities of criteria and social contexts. This chapter shows that historical

imbalances remain a fundamental concern for women's access to the market. Enterprise development requirements within the REIPPPP must be structured and well thought through; therefore, the impact and EnD funds are limited. Programmes and frameworks should encourage transformation and not contribute to the growing divide blocking the change we seek for women's economic empowerment in South Africa.

Women need access to working capital like most entrepreneurs, but their risk profile makes it even harder to establish their businesses. Successful women-owned businesses share the value of mentorship and social capital to help them establish themselves within the sector.

There are sustainable income streams over the 20-year lifespan of an IPP, and it provides an enormous opportunity for investment in targeted enterprise development, including socio-economic development for women entrepreneurs. Collaborative efforts by developers and implementing agents in the same communities are critical for shared impact and sustainable community development. Collaborative efforts could be implemented through a joint fund for women entrepreneurship under the enterprise development commitments. Collective innovative solutions for women entrepreneurs should include informal women entrepreneurs in co-designing entry mechanisms into the value chain to encourage women entrepreneurship and women's economic empowerment as well as participation.

Industry bodies should play a proactive role in setting targets for women entrepreneurs within the value chain. Accountability on enterprise development expenditure requires training not only communities but also enterprise development managers to understand the context of entrepreneurial orientation to contribute to women's entrepreneurship. There is no doubt that investment in women-owned businesses creates opportunities within society and an increase in standards of living.

Mentorship should expand from the formal to the informal sector to provide women entrepreneurs with natural, long-lasting social capital. Mentorship should focus on soft skills and the entrepreneurial mindset to create sustainable business economically.

The requirements for local businesses participating in the REIPPPP should be reassessed where there is a fee cap, and women-owned businesses do not feel free of financial strain due to their participation amongst international players in the market.

Market opportunities exist in the decommission of IPPs; for rounds 1 and 2, plant planning should be in the pipeline, and there are opportunities for decommissioning protocols such as disassembly, product breakdown, recycling, and waste management. Budgets should be channelled to the value streams that could exist.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This final chapter of the research study synthesises the findings and the themes developed through the data collection process. It highlights the research questions, contributes to the answers to the research questions, and provides recommendations for the renewable energy sector, supporting the study's propositions. Future research opportunities have been identified and mentioned in this chapter.

6.2 Conclusion

The research study acknowledges that stimulating women's entrepreneurship can significantly benefit the South African economy and society, contributing to economic growth and meeting national targets set out in the NDP. Entrepreneurship is said to be the key to unlocking historic economic equality in the country. In the case of this study, enterprise development in the Renewable Energy Independent Power Producer Procurement Programme (REIPPPP) is the independent variable in this study, and women entrepreneurship is the dependent variable. The research aims to provide the renewable energy sector with propositions about enterprise development and how it can stimulate an entrepreneurial ecosystem.

The study uses an interpretivism paradigm to determine whether enterprise development programmes in the REIPPPP add significant value to women entrepreneurs' development. The participants used in this study were selected non-random. Participants actively participate in the renewable energy economy as professionals or women entrepreneurs in the informal and formal economy. The research questions and objectives are to interpret and understand to which extent REIPPPP and the committed 0,2-0,7% revenue investment to enterprise development support women entrepreneurship through mechanisms such as enterprise development criteria, enterprise development programmes, regulation and its response to Sustainable Development Goal 5, gender equality.

Resource-based theories are embedded in this study, focused on human, social and financial capital necessary to gain a competitive advantage. There needs to be more research on the topic given that the sector has just passed its 10-year mark; therefore, the research method is qualitative. The inductive approach supports evidence-based stories by South African economic development professionals and women entrepreneurs about their experiences. This methodology is suitable for relaying participants' socio-political views, beliefs and intentions by participants.

Thematic analysis was used to analyse the data. The following themes were identified for this study *SA's Historical Imbalances, Entrepreneurial Orientation, Entrepreneurial Intent vs Opportunity Recognition, Entrepreneurial Risks, Criteria, Compliance & Reporting, Social Performance: M&E, Incubation and Acceleration Programmes, Skills Development & Training, Capacity Building Cooperatives, Market Access, Asset-based community development, EnD Finance & Structure, RE Industry Commitment, Women's Accessibility to Working Capital, Gender Stereotypes, Collectives, Mentorship, Women's Economic Empowerment and Women & Society.*

Based on the findings, a positive relationship exists between incentivised procurement and social enterprises in the informal sector and achieving an advantage through collective identity; enterprise development and women's entrepreneurship through human capital, social capital and financial capital; community-based development agencies and business sustainability; asset-based community development (ABCD) and entrepreneurship ecosystems; BBBEE and policy and women's empowerment through entrepreneurship, however, criteria is limiting due to lack of transparency and monitoring and evaluation and finally a positive relationship between policy and women empowerment and gender equality.

This research contributes significantly to the renewable energy sector, recommending that enterprise development programme structure is critical for social impact. EnD-supported programmes should target women to stimulate their entrepreneurship and participation in the sector. Incentivised procurement can promote new market entry to local micro-enterprise. Accountability of EnD funds should go beyond reporting using the Annexure B mechanism. Local accountability and due diligence should be established as inclusive

instruction. Finally, gender awareness could support the shift to broader women's economic empowerment in Local communities and break traditional gender stereotypes. This would encourage women's entrepreneurship in a male-dominated sector and eliminate discrimination.

6.3 Recommendations

- 6.3.1 It is valued by the participants of this study in acknowledgement of the renewable energy sector on the learnings over the past 10 years from a developmental perspective. Therefore, targeted implementation for women's entrepreneurship and economic participation can be promoted.
- 6.3.2 The sector is rich in opportunities for finance and generating revenue streams for its investors. Enterprise development programmes must be well structured and thought through for longer-term sustainability and impact, as lightweight programmes add little to the local informal economy.
- 6.3.3 There is an opportunity to drive impact in communities over the 20 years whilst an IPP operates. Meaningful collaborations between competitors within the same communities create an opportunity to contribute to sustainable enterprise development. It could alleviate corruption and due-diligence procedures to avoid applicants who lodge false applications at more than one IPP under false pretences. Innovation is required about how due diligence is done; whereby commercial banks currently need help to assess this.
- 6.3.4 The South African Wind Energy Association and the South African Photovoltaic Industry Association facilitate conversations with industry members on social performance and prioritising gender diversity in equity.
- 6.3.5 As a respondent stated, it is, therefore, necessary that transformative legislation should facilitate change and not block change. This is felt by organisations who feel being gender sensitive to promoting economic activity based on criteria limits impact.
- 6.3.6 Improvement of mechanisms for market access for local women entrepreneurs is critical to their participation, having local companies bidding in the REIPPPP and the programme should incentivise local businesses suggesting that the cost of

funding should be defined and there should be a fee cap for local renewable energy businesses to build their respective portfolios.

- 6.3.7 The sector needs more social science professionals to be able to work alongside technical professionals within the sector on project design and implementation for sustainable enterprise development. This further supports the notion of collaboration on projects and channelling funds to meet shared obligations and objectives. The IPPO can facilitate these collaborations.
- 6.3.8 An agile methodology for measuring interventions throughout the lifespan should be adopted. This is to incorporate lessons and learnings throughout the enterprise development process. The period development takes in a rural community should be acknowledged. Investment should be considered to stimulate women's entrepreneurship and economic inclusion.

6.4 Further Research

It is suggested that researchers interpret and assess enterprise development initiatives in South Africa. Including the relationship to social performance, they are considering a solid drive to be compliance driven IPPs in the REIPPP. It ensures the meaningful development of programmes, especially when women's participation in the economy through entrepreneurship is at the forefront. Further research in entrepreneurship for women in the sector could benefit the renewable energy sector by identifying growth areas for commitment to gender diversity and equality.

Exploring gender equality in women's entrepreneurship could support implementing agents in enterprise development, and deeper insight into gender mainstreaming on investments could promote enterprise development for women entrepreneurs within the renewable energy sector. This would also prove the ability of economic development professionals implementing programmes to understand women entrepreneurs' social complexities and how they can act as facilitators for market entry and sustainability over the long term through programming.

Localised perspectives can encourage participation and impactful programme design, and therefore, a broader sample size would be beneficial to expand research in this domain.

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ANNEXURE A: ETHICS APPROVAL

Graduate School of Business Administration
University of the Witwatersrand, Johannesburg



Wits Business School Ethics Committee
Constituted under the University Human Research Ethics Committee (Non-Medical)

Ethics Clearance Certificate

Ethics protocol number: WBS/EN1543596/874

This certificate is only valid with a legitimate ethics protocol number and signed by the Researcher (below)

This certificate is only valid if accompanied by formal permission from the relevant stakeholder(s).

Project title	Women entrepreneurship and enterprise development in the Renewable Energy Independent Power Producer Procurement Programme in South Africa
Investigator / Researcher	Miss Kelly Grace Alcock
Nature of Project	MM in Entrepr & New Venture Creation
Decision of the Committee	Approved, provided stakeholders and participants are advised that anonymity and confidentiality cannot be guaranteed.
Issue Date of Certificate	24 11 2022
Expiry date	Date of submission of the project / research report
Chairperson	Prof Anthony Stacey ☎ +27 11 717 3587 ☎ +27 82 880 4531 ✉ anthony.stacey@wits.ac.za

Declaration by Researcher

One copy must be signed by the Researcher and returned to the Chairperson of the Wits Business School Ethics Committee.

I fully understand the conditions under which I am authorized to carry out the abovementioned research and I guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I undertake to resubmit the protocol to the Committee.

Signature

24 November 2022

Date:

ANNEXURE B: STUDY CONSENT DECLARATION



PARTICIPANT INFORMATION SHEET

December 2022

Women Entrepreneurship and Enterprise Development in the Renewable Energy Independent Power Producer Procurement Programme in South Africa

Dear Participant,

My name is Kelly Alcock and I am doing research under the supervision of Professor Boris Urban, Programme Director at Wits Business School in the Department of Commerce, Law and Management towards my MM in Entrepreneurship and New Venture Creation at the University of the Witwatersrand. I would like to formally invite you to participate in a study entitled **“Women Entrepreneurship and Enterprise Development in the Renewable Energy Independent Power Producer Procurement Programme in South Africa”**.

WHAT IS THE PURPOSE OF THE STUDY?

The research problem is crafted by the socio-economic challenges that South African women face which directly impacts women entrepreneurs and entrepreneurial activity by women. The research aims to provide the renewable energy sector with propositions in regard to enterprise development and how it can stimulate an entrepreneurial ecosystem with entrepreneurship being the key to unlocking economic inequality for women in South Africa especially in the informal sector.

WHY BEING AM I INVITED TO PARTICIPATE?

The study will use purposeful sampling based on respondents which could be ‘rich’ in information (Patton, 1990: 169). The participants are active in the field of economic development and entrepreneurship within the REIPPPP in South Africa. The sample is non-probability, every participant was selected based on their experience within the renewable energy sector. The participants in this study are said to be women entrepreneurs also referred to as beneficiaries supported by the EnD component of the REIPPPP as well as enterprise development and socio-economic development managers of the renewable energy projects in South Africa.

Personal information was logged onto a participant database, and the contact data was sourced from LinkedIn. Information was also retrieved by working with the Director of the WeConnect RESA women’s network and the Economic Development WhatsApp group which I was invited to. The study aims to interview 10 using semi-structured interviews and 15 participants for a focus group.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves audio and video taping of a semi-structured interview on the following themes 1) Demographic questions 2) Advancement of Women in Entrepreneurship 3) Women’s Economic Empowerment and REIPPPP and 4) Gender Equality. Your participation in the interview will be for the duration of 30min in order to collect data based on the semi-structured questionnaire (Please find the questionnaire [here](#))

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participating in this study is voluntary and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason. A transcript of the recorded interview will be provided upon your request should you choose to withdraw your participation. *Anonymity cannot be guaranteed however no names will be mentioned in the report.*

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

This study remains significant as there has been no research to date which focuses on the enterprise development for women entrepreneurship in the REIPPPP. This includes women's empowerment, enterprise development such as incubation and acceleration through the community benefit model that exists within the REIPPPP. There is no doubt that women create unseen value for their communities and in direct and indirect ways. The networks formed between women have been a response to policy such as gender capital where the advantage is associated with femininity. This investigative study will bring together industry experts, entrepreneurs and decision makers on thematic areas related to enterprise development of the REIPPPP to discuss current initiatives and programmes specifically designed for developing and supporting women entrepreneurs in contribution to the economy and as well as providing opportunities for women owned businesses.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

The participants name and surname will not be asked. For the purpose of the report, individual identities will not be disclosed and if the organisation wishes to partake in the study and remain anonymous it will be referred to 'a renewable energy company'. Anonymity can never be guaranteed but confidentiality by agreement can.

Your answers may be reviewed by people responsible for making sure that research is done properly, including the transcriber, external coder, and members of the Research Ethics Review Committee. Otherwise, records that identify you will be available only to people working on the study, unless you give permission for other people to see the records.

The anonymous data may be used for other purposes, such as a research report, journal articles and/or conference proceedings. Your privacy will be protected in any publication of the information [e.g., *A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report*].

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

I undertake to protect the privacy of all personal information provided to me by participants during the data collection process by taking appropriate ethical measures and shall only process the personal information for the limited purposes of research into the categorical phenomena relating to "*Women Entrepreneurship and Enterprise Development in the Renewable Energy Independent Power Producer Procurement Programme in South Africa*".

Personal information of applicants shall not be shared with any third party for processing other than as permitted in terms of applicable law and unless that third party undertakes to put in place adequate protection measures that are no less protective of the personal information than the measures put in place myself as a student at WBS to protect the personal information concerned.

By participating in study, you consent to the lawful processing of your personal information by myself Kelly Alcock for the above-mentioned purpose(s) and agree that you understand the purpose(s) for which your personal information is required.

Hard copies of your answers will be stored for a period of five years on a cloud and or Google Drive for future research or academic purposes; electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable. Indicate how information will be destroyed if necessary [*e.g., hard copies will be shredded and/or electronic copies will be permanently deleted from the hard drive of the computer through the use of a relevant software programme*].

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

No payment or reward will be offered, financial or otherwise.

HAS THE STUDY RECEIVED ETHICS APPROVAL

This study has received written approval from the WBS Postgraduate Committee. A copy of the approval letter can be provided upon request.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Kelly Alcock on 0713659019 or Kelly.grace30@gmail.com. The findings are accessible for March 2023- June 2023. Should you have concerns about the way in which the research has been conducted, you may contact Prof Boris Urban on boris.urban@wits.ac.za

- I acknowledge the participant information sheet and agree to participate in the study.
- I acknowledge the participant information sheet and agree to withdraw my participation in the study.

Thank you for taking time to read this information sheet and for participating in this study.



Kelly Alcock

Participant

ANNEXURE C: RESEARCH INSTRUMENT

SEMI-STRUCTURED INTERVIEW QUESTIONNAIRE

PART 1: INDUSTRY PARTICIPANTS

Research Questions	Interview Questions
<p>To what extent does enterprise development contribute to women's economic empowerment ensuring 'growthiness' for women entrepreneurs?</p>	<ul style="list-style-type: none"> ➤ Have you participated in any entrepreneurial programmes? ➤ If you answered yes to the previous question, what was the name of the entrepreneurial programme?
<p>To what extent can incubation and acceleration programmes in the REIPPPP be mutually beneficial and contribute to women's economic empowerment?</p>	<ul style="list-style-type: none"> ➤ How do you understand Women in Entrepreneurship ➤ Does your organisation support any women entrepreneurs? ➤ Does your organisation support women entrepreneurs through any entrepreneurial programmes? ➤ What is the name of the entrepreneurial programme?
<p>To what extent does the REIPPPP through responsive ED policy for women encourage entrepreneurship by</p>	<ul style="list-style-type: none"> ➤ In terms of WEE, how has your organisation contributed to it?

<p>women and promote women's economic empowerment?</p>	<ul style="list-style-type: none"> ➤ In terms of WEE how has your organisation prioritised to it ➤ Would you say it is important to have well-funded initiatives in the renewable energy sector? ➤ Would you say that longer-term initiatives in the renewable energy sector deliver more sustainable results? ➤ Would you say that Renewable energy sector initiatives that have good policy frameworks deliver better results? ➤ Would you say that capacity development of women is a critical success factor in the renewable energy sector?
<p>To what extent is the is the REIPPPP gender responsive to SGD 5 in South Africa reflecting on women entrepreneurship?</p>	<ul style="list-style-type: none"> ➤ Would you say that gender responsive entrepreneurial programmes impact the livelihoods of women in a positive way? ➤ Would you say gender responsive renewable energy frameworks can support equal access to entrepreneurial opportunities? ➤ Would you say that women success is attributed to their ability to influence members of their community? ➤ Would you say that women's business success also translates into reinvestment in families and communities? ➤ Would you say that women it harder to access capital?

	<ul style="list-style-type: none"> ➤ Would you say that women are left out of business networks and access to market information
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PART 2: WOMEN ENTREPRENEURS

Research Questions	Interview Questions
Demographic information	<ul style="list-style-type: none"> ➤ What is your nationality? ➤ What is your age? ➤ What is your gender? ➤ What is your highest level of Education? ➤ Which province do you reside in? ➤ Describe your business ownership. ➤ How long has your business been in operation? ➤ In which industry would you categorise your business?
To what extent does enterprise development contribute to women's economic empowerment ensuring 'growthiness' for women entrepreneurs?	<ul style="list-style-type: none"> ➤ ➤ Longer-term initiatives in the renewable energy sector deliver more sustainable results. ➤ Capacity development of women is a critical success factor in the renewable energy sector. ➤ Women in the renewable energy sector that have decision-making power deliver better outcomes.

	<ul style="list-style-type: none"> ➤
<p>To what extent can incubation and acceleration programmes in the REIPPPP be mutually beneficial and contribute to women's economic empowerment?</p>	<ul style="list-style-type: none"> ➤ Have you participated in any entrepreneurial programmes? ➤ If you answered yes to the previous question, what was the name of the entrepreneurial programme?
<p>To what extent does the REIPPPP through responsive ED policy for women encourage entrepreneurship by women and promote women's economic empowerment?</p>	<ul style="list-style-type: none"> ➤ Renewable energy sector initiatives that have good policy frameworks deliver better results. ➤ It is important to have well-funded initiatives in the renewable energy sector.
<p>To what extent is the is the REIPPPP gender responsive to SGD 5 in South Africa reflecting on women entrepreneurship?</p>	<ul style="list-style-type: none"> ➤ Gender responsive entrepreneurial programmes impacts the livelihoods of women in a positive way. ➤ Gender responsive renewable energy frameworks can support equal access to entrepreneurial opportunities. ➤ Women's success is attributed to their ability to influence members of their community. ➤ Women's business success also translates into reinvestment in families and communities. ➤ Women find it harder to access capital.

	➤ Women are left out of business networks and access to market information
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Confidentiality: For the purpose of this research semi-structured interviews will be recorded however no personal information of the participants or their organisations will be used in this research paper. The findings and conclusions will be sent for fact checking to the participants which includes a consent form to publish the findings in respect of this research paper only.