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Strategies for gender mainstreaming in climate finance mobilisation in southern Africa

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Abstract

This study examines the practice of gender mainstreaming in the context of climate finance mobilisation. It reveals how financial institutions are adopting shifts to organisational strategy, policy, and practice that advance the integration of key aspects of social sciences. This article specifically examines the role played by the Green Climate Fund's Gender Policy in promoting a shift in the organisational strategies developed by development finance institutions and commercial banks in southern Africa. It reveals how practitioners are grappling with the evolving role of financial intermediaries in promoting a shift towards low-emissions, climate-resilient, and just development. The analysis uncovers foundational components, highlights key lessons, and identifies strategic approaches to institutionalising gender mainstreaming practices. Critically, the research reveals that whilst gender mainstreaming involves multiple practicalities, the financial institutions that have most extensively institutionalised gender mainstreaming practices have done so by recognising its normative basis and have perpetuated changes to organisational values and culture alongside more pedestrian policy amendments. One of the critical aspects of this culture shift is the recognition that transformative social impacts in climate finance are predicated on the design and implementation of projects that account for existing gender-based vulnerabilities *whilst also* identifying and maximising opportunities for all genders. The study builds on and contributes new knowledge to existing frameworks for understanding gender mainstreaming in relation to multilateral climate finance.

1. Introduction

The integration of social sciences into development finance has emerged as a significant paradigm shift in the field of international development. The understanding that economic growth alone does not guarantee sustainable and equitable development has led to the recognition of the pivotal role played by social factors in shaping development outcomes. The emergence of alternative paradigms, the introduction of social impact assessment methodologies, participatory approaches, and multidimensional perspectives on poverty have all contributed to the mainstreaming of social sciences in development finance practices.

work for has Non-Disclosure Agreements (NDAs) in place to protect sensitive corporate information. Individuals interviewed did so in confidence on the basis that they would not be named, so that they could speak freely about the challenges their organisations, and them as individuals, have faced. Study participants agreed to share information on the basis of anonymity. Given that study participants represent commercial entities we are unable to provide commercially sensitive data publicly. Anonymised data can be provided to reviewers or other researchers upon request. Requests can be sent to the Directors of SouthSouthNorth Africa NPC care of Dr Shehnaaz Moosa shehnaaz@southsouthnorth.org.

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There is a growing body of literature emphasising the need for mainstreaming social sciences in the approach to tackling climate change. The integration of social sciences in development finance helps ensure that climate change responses are inclusive, participatory, and address the diverse needs and vulnerabilities of communities, including gender-related dimensions.

Scholars and researchers have recognised that climate change is not solely an environmental or technical issue but is deeply intertwined with social, economic, and political factors. This need has found its way into many of the decisions reached under the UNFCCC, such as the Paris Agreement, as well as into many of the mechanisms established to operationalise a globally co-ordinated response to climate change at regional and national levels. These developments contribute to a more holistic and people-centered approach to climate change and sustainable development.

The emergence of gender mainstreaming in the context of climate change and development finance represents a crucial recognition of the intersectionality between gender, climate change, and sustainable development. Gender mainstreaming acknowledges that climate change affects women and men differently due to existing gender inequalities, social norms, and power imbalances. It emphasises the need to integrate gender-sensitive and gender-responsive perspectives across climate policies, strategies, and actions to ensure equitable and effective responses.

International climate finance (hereafter climate finance) is a particular branch of development finance recently established to support developing countries in shifting their developmental pathways towards low-emissions, climate-resilient development. Climate finance institutions play a crucial role in operationalising socially-responsive development. The Green Climate Fund (GCF), one of the main operating entities of the financial mechanism of the Paris Agreement and a key source for grants and *concessional* finance (loans offered on more generous terms than market finance) is of specific interest in this regard as their GCF Gender Policy has become recognised as growing best practice in mainstreaming gender in development finance.

Relatively little has been written about the emerging strategies for pursuing gender-mainstreaming in climate finance and the lessons that can be drawn from this pioneering field to inform the shift towards including social sciences in development finance more broadly.

In 2021, the United Nations Development Programme (UNDP) developed a *Framework for Enhancing Gender Equality and Poverty Integration in Climate Finance* under their *NDC Support Programme* [1]. This article examines the experiences of nine organisations, including regional development banks such as the Development Bank of Southern Africa (DBSA), national development banks such as the Development Bank of Namibia (DBN), as well as commercial banks such as FBC Holdings Zimbabwe, functioning as GCF Accredited Entities (AEs), or actively pursuing GCF accreditation, in southern Africa. The UNDP Framework is applied as a lens through which to examine the lessons that can be drawn from the practical experiences of these organisations operating at the leading edge of the practice of integrating social sciences, particularly related to gender-mainstreaming, into development finance in southern Africa.

The findings of this article point towards strategic considerations that advance gender-mainstreaming in climate finance practice. These strategic considerations have relevance to the broader field of development finance and thus speak to the practical aspects of mainstreaming social sciences in development practice. The findings further reveal how climate finance represents an opportunity for perpetuating the adoption of social science approaches by commercial finance institutions and as such is playing a leading role in a broader shift taking place within the finance sector at large. Lessons emerging from this research can thus be capitalised on to advance socially-responsive development across the public and private sectors.

2. Literature review

2.1 The inclusion of social-science considerations in development finance

The early years of development finance were primarily driven by economic theories and focused on achieving economic growth as the primary goal. Scholars and practitioners such as [2,3] emphasised the importance of capital investment and infrastructure development [4]. The social dimensions of development were largely overlooked during this period. Critics of the dominant economic-centric approach challenged its limitations and argued for the inclusion of social sciences in development finance. The influential work of [5] and his "capabilities approach", which emphasised the significance of enhancing human well-being and expanding individual freedoms, brought attention to social factors and paved the way for broader perspectives in development finance [6,7]. The Human Development Report, published by UNDP, introduced the human development paradigm in the early 1990s. This framework expanded the focus of development finance beyond economic indicators and emphasised the importance of education, health, gender equality, and other social dimensions as central to human well-being [6,8].

The World Bank, as a key player in international development finance, has played a significant role in shaping the integration of social sciences into its approach to development. Over time, the World Bank has evolved its perspective to incorporate social factors and has recognised the importance of a multidimensional understanding of development. One pivotal milestone in the World Bank's approach was the publication of the World Development Report 1990, titled "Poverty." This report emphasised the multidimensional nature of poverty and highlighted the significance of social factors such as health, education, and gender equality in poverty reduction efforts. The World Bank's recognition of the interconnectedness of economic and social factors reflected a shift towards a more inclusive and holistic approach to development finance [9]. Through the adoption of participatory approaches, social impact assessment methodologies, and recognition of the interconnectedness of economic and social factors, the World Bank has pursued a more holistic and people-centered approach to development finance.

The emergence of Social Impact Assessment (SIA) methodologies further contributed to the inclusion of social sciences in development finance. SIA provided a systematic framework for evaluating the social consequences of development projects, helping to ensure that social factors were considered alongside economic aspects [10].

The International Finance Corporation's (IFC) Performance Standards on Environmental and Social Sustainability have played a crucial role in advancing the integration of social sciences in development finance. Based mostly on the World Bank's operational policies, the IFC adopted the Safeguard Policies in 1998 to manage environmental and social issues related to private sector investment in emerging markets [11]. By emphasising the importance of conducting social impact assessments, stakeholder engagement, and community consultation, the Performance Standards highlight the significance of social factors in development projects. This reflects a recognition that sustainable development requires a comprehensive understanding of the social dimensions that influence project outcomes. While the Performance Standards address various environmental and social factors, including stakeholder engagement, labor rights, and community health and safety, they do not explicitly prioritise or provide specific guidance on gender mainstreaming. The IFC Performance Standards refer in generalised terms to gender as one of the cross-cutting issues and in specific relation to land and natural resource management, consultation and free, prior and informed consent (FPIC), and harassment however, the standards tend to adopt a 'vulnerable groups' approach and provide few requirements for adopting a gender-responsive approach or attention to the situation and rights of women [12]. The absence of clear provisions pertaining to gender mainstreaming in the IFC Performance Standards is a significant gap in the integration of social sciences in development finance.

2.2 The emergence of gender mainstreaming in climate finance

The concept of gender mainstreaming in relation to climate change emerged gradually over time as scholars and practitioners began to recognise the importance of gender considerations in climate change responses, with early references to the intersection of gender and climate change found in the late 1990s and early 2000s. For example, a 1998 report by the United Nations Framework Convention on Climate Change (UNFCCC) noted that "women have a key role to play in the mitigation of greenhouse gas emissions and in adaptation to climate change" [13]. It recommended that gender considerations be integrated into climate change policies and programs [13]. Similarly, a 2004 report by the United Nations Development Programme (UNDP) called for greater attention to gender issues in climate change adaptation, noting that women's vulnerability to climate change impacts was often exacerbated by gender inequalities [14]. The term "gender mainstreaming" likely emerged in this context to describe the need for gender considerations to be integrated into all climate change responses, including policy development, program design, project implementation, and ultimately financing as well.

While gender considerations in climate change responses have been recognised for some time, the focus on mainstreaming gender into climate finance efforts has emerged more recently. One of the earliest mentions of the term "gender-responsive climate finance" can be found in a 2015 report by UNDP, which emphasised the need for climate finance to address gender inequalities and support women's participation in climate change responses [15].

The Green Climate Fund's (GCF) gender policy represents an evolution of the IFC Performance Standards by explicitly prioritising gender equality and women's empowerment within the context of climate finance. While the IFC standards do not have explicit provisions on gender mainstreaming, the GCF's Gender Policy reflects a significant advancement in recognising the intersectionality of climate change, gender, and development.

The GCF first adopted a gender policy and action plan in 2015 that initially only committed to a gender-sensitive approach; however, this approach has been revised and updated several times subsequently. Later revisions moved beyond a narrow understanding of gender to consider, respect and value the contribution of both women and men, made gender assessments a mandatory requirement at the project level, emphasising gender-responsiveness rather than gender sensitivity. These updates also recommended a language shift from a singular discourse of vulnerability to one recognising multiple identities' inherent value, importance and potential [16]. In so doing, the GCF Gender Policy represents a pertinent development in the mainstreaming of social sciences in development finance by moving beyond a purely risk-based framing to one that promotes the identification of opportunities that can enhance and empower those previously disadvantaged by social and economic positioning. The GCF's latest updated Gender Policy and Action Plan 2020–2023 builds on the foundation laid by the earlier Gender Policies and outlines precise requirements across the project life cycle, including concerning the roles and responsibilities for AEs. The updated policy also emphasises ensuring that the GCF's investments benefit women and girls and engaging women's organisations and other gender-focused stakeholders in decision-making processes. The policy highlights the need to address intersecting forms of discrimination, such as those based on age, disability, ethnicity, and sexual orientation, and to incorporate a feminist perspective that recognises the power dynamics and structural inequalities that shape gender relations.

Whilst this is a welcomed shift, it presents a challenge for institutions such as AEs who will need to adopt and integrate this new approach into their operations, where they may currently lack the understanding and capacity to apply this broader conception of gender-mainstreaming. In order to integrate and operationalise this broader conception requires that institutions understand where and how to apply the GCF Gender Policy requirements both within their strategic and operational frameworks, as well as within the conceptualisation and design of GCF funded-projects. There is a small, but growing body of literature offering some guidance in this regard.

2.3 Towards a framework for gender integration in international climate finance

With the increasing focus on gender mainstreaming across multiple disciplines, particularly in international development, and with the added impetus provided by the GCF and its peers' adoption of gender policies, several frameworks have been developed to support the implementation of gender mainstreaming efforts in development finance practice. Once such framework, and valuable analytical and organising tool is the UNDP Framework for Enhancing Gender Equality and Poverty Integration in Climate Finance [1].

This framework considers the various aspects and components of gender mainstreaming within three specific forms of climate finance: domestic public climate finance, innovative climate finance and, most relevant to this study, multilateral (international) climate finance.

The components of gender mainstreaming identified by UNDP are organised by the four pillars of their framework, namely, (1) Governance and institutional, (2) Resource planning and allocation, (3)Accountability, and (4) Capacity building [1].

The Governance and Institutional pillar of the framework emphasises institutional policies and strategic plans. The Resource Planning and Allocation pillar focuses on allocating and mobilising resources and tools for gender-responsive programming. The Accountability pillar speaks mostly to how entities ensure effective monitoring and evaluation. The cross-cutting Capacity Building pillar is centred on fostering the growth of organisational skills and knowledge.

3. Methodology

The UNDP Framework for Enhancing Gender Equality and Poverty Integration in Climate Finance [1] was developed based on good practices in Bangladesh, Cambodia, Fiji, Indonesia and Thailand, based on the input from UNDP Country Offices and relevant national stakeholders [1]. In this study, we apply the UNDP Framework to the gender mainstreaming approaches pursued by nine entities in six southern African countries seeking to mobilise GCF resources. The Framework's pillars provide the basis for the organisation of our findings presented below.

Additionally, the framing of this research drew upon the Guide to Strengthening Gender Integration in Climate Finance Projects developed by [17]. The WEDO & CDKN Guide offers a valuable perspective on aspects of gender mainstreaming that underpin the effective integration of gender in climate finance project design and implementation. The Guide refers to practitioner experience across designing and implementing projects for four multilateral climate finance funds, including the GCF. We draw upon the Guide's findings to further inform our observations of the experiences of entities seeking to mainstream gender in climate finance in southern Africa.

This research emerged in the unique context of the Southern Africa Climate Finance Partnership (SACFP). The SACFP has been a multi-year, multi-stakeholder knowledge brokering programme in the SADC region since 2016. It has led to forming of a community of practice comprised of emerging climate finance practitioners from six countries in the SADC region, representing nine institutions that share the goal of mobilising international climate finance and, in particular, attaining GCF access. These institutions are:

- CRDB Bank (CRDB)—Tanzania
- Development Bank of Namibia (DBN)—Namibia
- Development Bank of Southern Africa (DBSA)—South Africa
- Environmental Investment Fund of Namibia (EIF)—Namibia
- FBC Bank (FBC)—Zimbabwe
- Infrastructure Development Bank of Zimbabwe (IDBZ)—Zimbabwe
- National Development Bank of Botswana (NDB)—Botswana
- South African National Biodiversity Institute (SANBI)—South Africa
- Zanaco Bank (Zanaco)—Zambia

The institutions that are further ahead and already mobilising climate finance have been able to share lessons with those starting their journey. Through the support of the International Development Research Center, the third phase of the SACFP programme, which ran from 2020 to 2023, included an aspect of demand-driven applied research. The authors of this study were part of the team that delivered the programme's third phase. At the inception of the third phase, the team undertook a detailed capacity needs assessment, revealing the demand for support to better understand and implement gender mainstreaming in practice. Over three years, the team facilitated iterative support to stakeholder institutions through knowledge brokering, capacity building, technical assistance, and applied research interventions. This context has provided the team with a unique opportunity to conduct summative research on gender mainstreaming by examining the collective experiences of the community of practice.

Consequently, the team adopted a qualitative, human-centred research methodology that leveraged the solid and trusted relationships and sense of reciprocity established with stakeholders in these institutions throughout the programme. The team produced institutional gap analysis reports of existing organisational strategy, policy and procedures for three institutions pursuing GCF accreditation, comprising desktop reviews and facilitating internal, multi-stakeholder dialogues.

The outcomes of the institutional analysis provided the basis for developing a line of questioning explored in key informant interviews undertaken with the three previously reviewed institutions and another two institutions, which are already accredited to the GCF. A total of nine participants were interviewed (two men and seven women). Ethical approval is not required for a study of this nature. All participants provided their consent prior to being interviewed and were provided with an opportunity to review the study findings prior to publication.

This iterative, human-centred approach to qualitative research has provided the basis for the primary research findings that surfaced through the study, namely, pertaining to the necessary practical measures and enabling conditions for institutionalising gender mainstreaming in the mobilisation of climate finance by AEs to the GCF. Whilst the findings stem from a small data set of southern African institutions, the consistency of GCF requirements and the congruence of experience amongst study subjects indicates strong potential for the study findings to be highly relevant to other institutions pursuing the same or similar goals elsewhere in the world.

4. Results

The implementation of gender mainstreaming in climate finance practice requires the institutionalisation of key foundational components. Whilst some of these have been previously identified in the literature, such as in the Framework for Enhancing Gender Equality and Poverty Integration in Climate Finance [1], and the Guide to Strengthening Gender Integration in Climate Finance Projects [17], our research reveals several additional critical considerations. These include evolving policies and procedures to be both external-facing and opportunities-focussed, developing internal capacity in relation to roles, responsibilities and mandates, and developing practitioner capability concerning technical knowledge and skills. Our research has surfaced 12 additional sub-components to those identified within the [1] framework. Importantly, our research has further revealed a distinct additional pillar pertaining to the need for a shift in organisational values and culture. These additional components and lessons are explored in the discussion below within the Framework developed by [1].

4.1 Governance and institutional

UNDP [1] identifies two components to strengthening gender mainstreaming in relation to the governance and institutional pillar. Firstly, they identify the need to sensitise and integrate gender considerations into investment policies and plans. UNDP considers this component from the perspective of national-level investment policy and plans and makes recommendations accordingly. Our research reveals that this component is equally necessary at the institutional level regarding the investment policies and plans of entities seeking to mobilise GCF resources as DAEs. Specifically, our research reveals three foundational shifts that DAEs need to undertake at the level of climate change investment strategy, policy and planning to enable gender mainstreaming.

4.1.1 Establishing gender mainstreaming in external-facing policies is a critical departure point. Effective gender mainstreaming is predicated on institutions evolving their policy and procedural frameworks in line with good practices. Before pursuing climate finance mobilisation, all but one of the entities studied had been approaching gender solely from an inward-facing perspective. For example, all institutions had gender-related provisions as part of their internal employment equity policies but did not have policy provisions related to the inclusion of gender in external investments or projects that they developed. The GCF requires that projects are developed in a gender-sensitive (at minimum) or gender-responsive manner [16]. All interviewees agreed that pursuing GCF accreditation was the primary driver for formalising revisions to their policy and procedural frameworks to fully activate an outward-facing gender focus.

As an exception to this observed trend, CRDB had already begun to develop outward-facing products and services with a gender lens before pursuing climate finance; as part of an initiative driven by the World Asset Finance Initiative. Having already established a track record of applying an external gender-responsive lens to project development was found to be of significant benefit in supporting the bank's application for GCF accreditation (CRDB, personal communication, 2023). This was seen as a factor that enabled the accreditation process to proceed expediently, including their ability to develop and readily adopt a gender policy in compliance with the requirements for GCF accreditation. CRDB (personal communication, 2023) attributes the early exploration of gender mainstreaming linked to a practical project example, i.e. the gender-focused products and services developed under the World Asset Finance Initiative project, with acculturating the organisation to external gender practices. This practical experience was seen to be of great benefit as opposed to trying to usher in new policies and procedures in the abstract, which has been difficult in the experience of several other entities interviewed.

4.1.2 Shifting from risk-based to opportunities-based approaches is a foundational precept. The experiences of study institutions demonstrate that gender consideration in external-related policy tends to first find its way into risk-management practices as part of the environmental and social risk identification and management processes adopted by financial institutions i.e. a harm minimisation or risk-based approaches pioneered by the World Bank and the IFC. Whilst ensuring that institutions undertake investment practices that do not result in harmful social outcomes is part of the GCF's safeguarding requirements, the GCF promotes a more progressive approach to gender mainstreaming. DAEs are required not only to undertake a gender assessment to surface the gender risks of the project and design project interventions such that they do not worsen gender inequality but also, gender assessments should surface opportunities for the project to include features within its design that can be said to be gender-responsive or gender-transformative [18]. In other words, climate projects funded by the GCF should seek to maximise the potential opportunities within the project to achieve outcomes that positively impact gender equity. Consequently, whilst all institutions have well-established environmental and social safeguarding policies and practices to manage investment risk, they require entirely new frameworks to guide and manage opportunities-based approaches. Whilst risk-based approaches within institutional policy may be sufficient for meeting GCF accreditation requirements, they would likely fail to guide the development of funding proposals that satisfy GCF project expectations for approval. It is, therefore, more strategic for organisations to pursue gender mainstreaming practice holistically, including integrating opportunities-based approaches.

4.1.3 Shifting from project-taker to project-maker is a significant departure from business as usual. The critical shifts from internal to external facing gender policies and from a risk-based to an opportunities-based approach are linked to a more profound and foundational shift in the institution's operations as they pursue the mobilisation of climate finance. This foundational change is what the DBSA refer to, in their experience, as the strategic shift from project-taker to project-maker (DBSA,personal communication, 2023). Where financial institutions newly exploring their role as climate finance intermediaries have historically (outside of climate finance) essentially played the role of project financiers—taking on bankable investments brought to them for consideration (i.e. as project-takers)—their role primarily having to do with undertaking due diligence and an assessment of financial viability. If the financial returns are viable, they provide investment capital. Their role starts and ends there without involvement in the design and execution of the projects. However, mobilising climate finance requires that they perform additional functions. As a GCF DAE, institutions are required to identify, source, develop, implement, manage risks, and monitor & report on climate projects (i.e. as project-makers). This is a much broader set of activities, requiring additional technical skill sets with which institutions are typically not equipped. The changes institutions are thus required to implement to shift from project-taker to project-maker need to happen concurrently with those changes they need to make to promote gender mainstreaming. This recommendation is echoed by [17] as well as [19] in advocating that gender considerations be integrated within overarching project design (and, by extension, preparation), particularly to overcome the tendency for projects to silo gender considerations, including them *post hoc* or to relegate gender specialists/expertise as supplementary and temporary.

Similarly, both highlight the likelihood that solid gender mainstreaming is predicated on a foundation of gender expertise and formalised processes for gender analysis and integration.

The volume and overlapping nature of these changes present a complex nexus that is both intimidating and difficult to navigate. Institutions, particularly their senior leaders, would benefit from being aware of this volume of change and from putting in place a strategic plan as part of a larger change management process for their organisation. This is of relevance not only to institutions seeking to mobilise climate finance, but more generally financial institutions pursuing gender-mainstreaming.

4.2 Resource planning and allocation

Strengthening evidence-based allocation is critical to gender mainstreaming [1]. UNDP (2021) states that "evidence-based allocation is critical for improving the quality of allocation and integrating gender and poverty co-benefits within planned climate investments" [1]. The need to undertake a gender analysis is a well-established aspect of gender mainstreaming and underpins gender-responsive programming [20]. The GCF see gender analysis as necessary to comprehend the social and economic issues that contribute to gender disparities being aggravated by climate change [20]. This analysis can help to identify how climate finance can be targeted to address the specific needs of women and men, and to ensure that gender concerns are fully integrated into the design and implementation of the program [21,22]. The outcomes of a gender analysis form the basis for developing a gender action plan. The GCF requires that gender analysis and gender action plans be integrated into the design and implementation of any GCF-funded projects [23]. GCF accreditation also requires institutions to demonstrate dedicated financial and human resources to comply with the GCF Gender Policy, supported by gender-responsive budgeting, guidelines and training [18].

WEDO and CDKN [17] point out that, ultimately, the successful implementation of gender-responsive projects hinges on allocating and applying financial resources based on gender-responsive budgeting. Gender-responsive budgeting refers to incorporating a distinct gender perspective into the overall framework of the budgeting process [24]. This approach ensures that budgetary allocations are used to address gender disparities and also identifies areas where gender inequalities exist. Some key factors enabling institutions to conduct gender-responsive budgeting effectively, as suggested by [25,26], include the enabling environment, effective tools for implementation, and a strong strategic plan.

4.2.1 Strong leadership, organisation-wide buy-in, and inter-departmental cooperation underpins mainstreaming gender in resource allocation policies and practices. This suite of mechanisms, i.e. gender analysis, action plans, and gender-responsive budgets, are of critical importance to institutions seeking to mobilise international climate finance and have been well established in the literature [1,17,18,27]. UNDP [1] points to the importance of including gender mainstreaming in "project prioritisation tools" to further advance resource planning and allocation. "Such tools typically include the following decision-making criteria: alignment with multilateral donors' investment criteria, coherence with national policy and regulatory frameworks, the extent of climate change mitigation and adaptation impact, and cost-effectiveness" [1]. As a prerequisite for GCF accreditation, and more specifically for GCF project approval, institutions need to have policies and procedures in place to guide the implementation of these mechanisms [28]. However, the GCF does not specify the form that these institutional policies and procedures should take, nor whether they should be universally applied (i.e in relation to non-GCF investments).

None of the study institutions had developed such mechanisms before pursuing GCF accreditation, nor did any the institutions have individuals with experience developing or implementing such mechanisms. Even where gender experts were employed, their expertise did not extend into the niche area of the intersection of gender and international climate finance, and there was, thus, to various degrees, reliance on external expertise.

Given the foundational changes to institutional operating frameworks examined under the first pillar and overlaying the additional need to develop and implement policies that incorporate these resource planning and allocation mechanisms, we observe that the scale of institutional change represented thereby presents a significant departure for business as usual for entities newly pursuing climate finance mobilisation. Navigating this new complexity reiterates the need for institutions to adopt strategic approaches to developing and implementing policies and procedures and the building of institutional capacity and individual capability to implement such.

Strong leadership is required to adopt and implement such strategic approaches. WEDO & CDKN [17] describe how those in leadership roles can use their position to advocate for greater recognition, prioritisation and uptake of gender equality, especially when facing institutional pushback or inertia. Whilst senior leaders in study entities generally understood the need for pursuing gender mainstreaming as part of the efforts to mobilise climate finance, they lack the knowledge and experience of what this means for their institutions in practice. Study subjects experienced that whilst the GCF Gender Policy states what is required, it does not explicitly state where the shifts in institutional policy frameworks should occur. This is to be expected given that whilst similar, each financial institution's policy and procedural frameworks are unique. To this end, all of the study institutions relied on assistance from external organisations, such as expert consultants or NGOs, to assist them in mapping out their needs and approaches to meeting them. For example, three study institutions found benefits in utilising a tool to undertake a gap analysis of their policy and procedural frameworks against the requirements of the GCF as well as emerging good practices identified by [17]. The gap analysis revealed the extent of the changes they would need to make and the degree to which various institutional departments would need to be involved in effecting these changes. The analysis formed the basis for internal consultations that enabled buy-in and inter-departmental cooperation to finalise and approve changes.

4.2.2 Climate finance projects present a useful sandbox to test out gender mainstreaming practices, but institutions should look further down the road and plan for their eventual broader adoption. The general experience of study institutions exploring the adoption of gender mainstreaming practices is that newly developed external facing gender policies and procedures are initially established for mandatory application only in a limited set of circumstances, such as for the specific development of GCF project proposals and do not generally apply across other investments. However, the experience of several institutions shows that within a relatively short amount of time, the benefits begin to be realised within the institution, and the policies and practices begin to be applied to an ever more broad set of investments. For example, in the case of CRDB, these are now being applied to GCF projects and all projects within their growing sustainability portfolio (CRDB,personal communication, 2023). In the case of IDBZ, recently accredited to the GCF, their new gender policies and practices apply across new investments of any type, not just those related to climate change (IDBZ, personal communication, 2023). FBC Holdings, a group of commercial finance institutions, is likewise pursuing gender mainstreaming in an integrated approach accross all operations (FBC,personal communication 2023).

Such an approach is particularly favourable as gender considerations become increasingly salient across development finance and to pre-empt escalating requirements over time. Such best practices will assist entities in getting "ahead of the curve", capitalising on this holistic mainstreaming process to avoid duplication of efforts in the near future when such best practices become standard requirements or as other funds and funders continue to look to the GCF for reference. Additionally, considering the extensive timelines of GCF accreditation and project consideration and approval, present satisfactory compliance may shortly 'expire' as new more rigorous criteria and requirements are introduced. As described above, there has been an observed trend of the GCF ratcheting up requirements over time, which is likely to continue considering the Fund's intention of distinguishing itself based on gender mainstreaming.

4.3 Accountability

UNDP [1] stresses the importance of adequate accountability mechanisms for effective climate finance planning and implementation. This involves developing gender-sensitive indicators to measure the impact of climate finance on gender equality and to track progress over time [29]. Without these, climate finance allocations will unlikely result in gender equality outcomes [1]. Specifically, [1] refers to the necessity for dedicated monitoring tools and impact reporting guidelines, the development of indicators and metrics for measuring the impact of investments, and ensuring opportunities for participatory evaluations. They further add that such tools should be built upon a data collection system that tracks sex-disaggregated project information and measures climate finance's qualitative and quantitative impacts [1]. In order to analyse gender-related changes over time, the monitoring and evaluation process must ensure that project indicators are gender-responsive across all outcome areas [20]. Finally, [1] stresses the importance of including gender-sensitive impact reporting principles within information disclosure policies and reporting guidelines. These aspects of gender mainstreaming are vital for assessing the relevance and performance of investment strategies and generating knowledge to improve resource allocation [1].

WEDO & CDKN [17] stress the importance of collecting the 'right' data from the start. This includes moving beyond simple measures based on participation and beneficiary data to include data on gendered roles, relationships and impacts [17]. Whilst some study institutions had been collecting limited sex-disaggregated data, such as lending information related to their client base, they did not have sufficiently developed monitoring and evaluation (M&E) systems to guide more complex gender data gathering and analysis processes linked to the investments they make. GCF accreditation has been the primary driver for them to consider this need. Developing gender action plans with relevant indicators for GCF projects enables institutions to trial such accountability mechanisms before mainstreaming them across their portfolio of ordinary investments. The need, as mentioned earlier, to shift from project-taker to project-maker further necessitates that these institutions develop more advanced internal project implementation and M&E capacity. Study participants indicated a strong need for individual capability building in this regard. This aspect is addressed further under the capacity building pillar below.

4.3.1 New roles, job descriptions, and KPIs need to be developed and implemented to ensure accountability in practice. Accountability in practice is predicated on having individuals with clear roles and responsibilities in place to drive implementation. Our examination of the experience of study institutions has revealed that, in almost all instances, gender mainstreaming has called upon institutions to examine individual and collective roles and responsibilities. As a new set of operations for institutions, the implementation of external-facing, opportunities-based gender policies and procedures require new operating functions. Consequently, institutions need to establish the operating mandate for gender mainstreaming within relevant departments, clarifying roles and responsibilities (i.e. with new or amended job descriptions) and critical for ensuring accountability and setting new key performance indicators (KPIs) for teams and individuals.

4.3.2 Gender champions need to be recognised and supported to pave the way for institutional change. The experiences of institutions indicate that effecting such foundational changes to mandates, job descriptions, and KPIs was not straightforward. In all instances, institutions had yet to employ individuals with the requisite gender expertise to guide the process. Consequently, non-experts stepped forward, or were by default required, to play the role of champions for gender mainstreaming. These early champions generally steered forward foundational institutional changes in addition to their existing roles and responsibilities, with little formal acknowledgement, said to be driven chiefly by passion. The efforts of these early champions are attributed to unlocking critical steps in their institution's progress. WEDO & CDKN [17] echo this finding, highlighting advocates for gender equality as a critical enabling factor, particularly in building gender considerations beyond the bounds of project activities.

4.3.3 New operational mandates for gender mainstreaming responsibilities of various business units need to be established. Ultimately however, ensuring that gender mainstreaming takes place, not only within the internal operations of the bank but also within the external investments they make and projects they develop, requires that new mandates be developed and housed at various levels within the institution. For example, pre-existing gender-related mandates related to risk management or employment equity are insufficient to promote gender mainstreaming. This means deciding where and how to delegate the new broader mandates for institutions.

DBN decided to house the new gender mainstreaming mandate within their pre-existing Management Credit and Investment Committee. This cross-functional committee did not ordinarily deal with gender or developmental matters; however, allocating the mandate was part of the CEO's strategic and cultural shift to bring greater focus on transformative development impact into the bank's operations. DBSA's experience in this regard illustrates that gender champions carry much of the responsibility for setting up and ensuring the functioning of such cross-functional teams.

4.3.4 Attributing new responsibilities and KPIs requires strong leadership and change management practices. Whilst allocating mandates to cross-functional groups is attributed to being a vital step in the gender-mainstreaming process, it comes with its challenges. The interaction between gender mainstreaming mandates across the organisation presents complex new ways of engagement for staff. Study subjects agreed that attaining buy-in from all members of newly mandated groups is initially difficult. Staff tend to be apprehensive about the new responsibilities they are given. It is especially risky to allocate new individual KPIs without first undertaking awareness raising, acculturation, and training activities so that staff understand what is expected of them. This should be seen as a participatory process in which senior leaders take responsibility.

4.3.5 Allocating gender mainstreaming KPIs to senior leaders advances the adoption of institutional changes. In the case of IDBZ, the mandate for gender mainstreaming "sits at the top", with the CEO being assessed on the bank's impact on youth, women and vulnerable groups (IDBZ, personal communication, 2023). The operational mandates and KPIs trickle down to the rest of the organisation. Similarly, DBSA has included gender mainstreaming in the CEO's mandate, which further trickles down into the corporate performance cards (i.e. KPIs) for executives newly delegated with various gender mainstreaming responsibilities (DBSA, personal communication 2023).

4.4 Capacity building

UNDP (2021) identifies central banks, corporate banks, and public sector agencies involved in climate finance as requiring capacity needs assessment and enhancement. Essential relevant capacities they identify include strong leadership, skills and knowledge to support gender-responsive resource allocation and accountability [1]. Providing training and technical assistance to climate finance practitioners to enhance their skills and knowledge on gender mainstreaming can help to build a gender-responsive culture within the climate finance community and to ensure that gender perspectives are integrated into all aspects of climate finance programming [30]. In short, both the literature and our findings above suggest that each of the other pillars of gender mainstreaming hinge on institutions having relevant capacity in place.

Institutional capacity, in this instance, refers to the availability of staff resources with the requisite mandates, knowledge, and skills. The Accountability pillar in the preceding section addresses the aspects of mandates. In this section, we deal with institutional capacity matters specifically relating to individual availability, knowledge and skills, i.e. individual capability. UNDP [1] specifically identifies the need for capacity needs assessment and targeted capacity-building programmes to build knowledge and skills related to climate finance, climate change impacts, and interlinkages with gender, and critically, to enable the mainstreaming of gender within the investment planning cycle. WEDO & CDKN [17,19] suggest team-wide capacity building opportunities (rather than just siloing expertise within gender specialists) to contribute to a broader baseline appreciation of gender mainstreaming and gender expertise so that team members can advance gender outcomes in their respective areas of expertise. Study participants all indicated great benefit in the teams-based training approach they experienced under the SACFP, which sought to expand awareness, sensitivity and understanding of gender mainstreaming practices beyond the gender focal points to the broader team working on climate finance matters within each institution. There are currently limited training opportunities of this nature available to DAEs, and the course piloted by the SACFP offers development partners valuable insight for future course offerings of a similar nature.

4.4.1 Dedicated expertise needs to be appointed, and budgetary allocations for this purpose need to be made. Typically, the decisions by study institutions to apply for GCF accreditation were reached at an executive level. However, the required additions and changes to organisational policy and procedures to comply with the GCF Gender Policy needed to be driven and implemented by individuals within the bank's operations. Given the pressure of complying with GCF accreditation requirements, in almost all instances, non-expert champions were required at some point to both drive the required changes to institutional policy and procedures whilst simultaneously undertaking their pre-existing functions. Study participants generally agree that having dedicated resources driving the updating of policy and procedural frameworks is a more optimal approach. Furthermore, they agree that the most effective approach is for institutions to employ dedicated resources with gender expertise to steer this process. Doing so can significantly reduce the timeframes associated with effecting the wide-scale changes and, ultimately, the timeframes for mobilising climate finance. This is reinforced in the recommendations of the [17], which advocates for building internal, wide-reaching capacity and deliberately integrating gender specialists/resources within climate finance/project development teams.

Despite the advantage of bringing dedicated gender expertise on board, the business case for doing so is challenging to make. The experiences of study institutions indicate that it takes anywhere from one to three years to effect the necessary policy and procedural changes to comply with GCF accreditation requirements. Developing GCF project proposals and having these approved is also a complex and time-consuming process, taking on average three years to complete, and subject to navigating the agendas of the GCF task managers and Secretariat, particularly in their discretion in shaping the project portfolio, and by extension, the expedition of projects (or not) through the bottlenecked GCF review pipeline. Additionally, there is a large window from project approval to the first disbursement of funds, sometimes up to a year.

Therefore, whilst administration fees drawn from GCF-funded projects can be utilised to cover the salaries of dedicated staff, there is a significant gap in time in which an institution will need to fund these salaries without a linked revenue stream. Once an institution has multiple GCF-funded projects approved, administration fees stack up, so the business case is more easily sustained. Although, as the experience of one accredited entity demonstrates, there still exists a risk where an institution's funded projects end, and newly funded projects still need to be approved, so there are no funds available to cover such salaries in the intervening period. This risk supports the case for not making gender capacity and resources GCF-specific (and thus not dependable) but mainstreaming and institutionalising such costs within broader operations and projects.

In addition to the challenging business case for funding dedicated expert salaries, finding experts in the region at the interface of climate finance and gender mainstreaming is difficult, with such combined skill sets being relatively scarce. Consequently, institutions have been relying on external consultants to build institutional capacity, supporting non-expert champions to augment institutional frameworks and providing awareness raising and skills development amongst the wider staff body. In some instances, this external support is provided pro bono by development partners and NGOs, and in other instances, this has been paid for by the institutions themselves.

The gap analyses also suggested that institutions engaged external consultants to develop policies, guidelines and toolkits for gender mainstreaming. While this approach can allow institutions to temporarily access/utilise specialised expertise particular to the GCF, it also presents a severe risk. Suppose this approach is not accompanied by internal capacity strengthening and socialisation of gender concepts and expectations. In that case, institutions risk being unable to conduct satisfactory quality assurance and evaluate their value and applicability. For example, the authors observed that several of the institutional policies reviewed during the gap analyses suggested having been hastily developed by third-party consultants without clear ideas of the organisation's work or the policy's application, using generic, boilerplate copy and recommendations not specific to development, climate or environmental investments or even showing signs of having been intended for completely unsuitable applications. Another gender policy reviewed, for example, whilst including good conceptual alignment and theoretical commitments to gender mainstreaming, lacks context, fails to align with other institutional policies, and lacks specific guidelines, actions or indicators for implementation. It does not make provision to develop these tools. Such policies are either impossible to practically implement or require additional time and resources to revise and operationalise, potentially furthering the opinion that such pursuit of gender mainstreaming is difficult, laborious, or costly.

Whilst the GCF is hypothetically accommodating of a marginal mainstreaming process to attain accreditation (offering conditional accreditation, for example), their expectations in considering and approving project proposals are much less flexible. The minimal viable product to get accredited with conditionalities is likely insufficient to get projects approved. Entities should look to avoid the situation experienced by recently accredited entities which have met the accreditation requirements (with/without conditionalities) based on updated policies/institutional frameworks but have no internal capacity to actually develop a project and so rely extensively on external consultants. Furthermore, entities may find themselves in a situation where they do not have the required internal team to rigorously manage the implementation of approved projects, leading to a slew of adverse outcomes impacting their ability to mobilise further climate finance in the future. WEDO & CDKN [17] highlight how the short-term, individual (and particularly international) gender consultant model dominates the project development landscape and caution how it is not best suited to the task.

4.4.2 Staff across various departments need to attain new capabilities built out in a stepwise manner. The effects of the foundational changes to institutional frameworks are felt across various actors within organisations, including those in risk, investment, compliance, and implementation departments. Individuals working within these departments require knowledge and skills about the interface of climate change and gender with their work. Additionally, they require knowledge of how their functions relate to one another in the aforementioned changing context of project taker to project maker. Consequently, they are exposed to a significant volume of new information and are expected to translate it into several new or augmented functions. The experiences of study institutions show that this degree of change and capacitation is best approached stepwise and benefits from a programmatic, multi-stakeholder approach, with iterative internal engagements over several years. It further benefits from having dedicated internal experts to maintain momentum to effect these changes over the extended time frames in which they take place.

In the case of DBN, for example, the first gender mainstreaming awareness and acculturation workshop with senior management took place in 2018 with assistance from the SACFP. Instead of developing a separate, standalone gender policy for application to GCF projects, the decision was taken to pursue gender mainstreaming in a holistic and integrated manner across DBN's existing policy and procedural frameworks. DBN has been unable to finance the appointment of a full-time gender specialist and has utilised non-expert champions and *pro bono* services to implement the decision. This approach took several years to foster complex integrated changes across the bank, forming part of a more extensive review of the bank's environmental and social management system. The process culminated in adopting a suite of revisions to policies, procedures and mandates adopted in 2022. At the time of publication, DBN has submitted their comprehensively revised frameworks to the GCF as part of its accreditation application. It hopes to receive approval for accreditation without any conditionalities on further gender mainstreaming requirements. Currently, the gender mainstreaming requirements are obligatory for GCF funded projects and optional for all other future projects in the bank's portfolio.

This experience differs from that of IDBZ, which hired two new gender experts in 2018 who shepherded the process of evolving the bank's policies and procedures to be in compliance with the GCF Gender Policy ahead of submitting their application for GCF accreditation. IDBZ makes the business case for these new hires by looking beyond their function in relation only to climate finance projects, which are yet to yield any revenue, and instead links their functions to advancing developmental benefits across their wider portfolio that is yielded as a result of taking a gender mainstreaming approach.

As these institutions continue to engage with project conceptualisation in new and emerging sectors like climate finance, amongst constantly evolving inclusion criteria, they will continue to face challenges of operationalising complex concepts into policy and practice (such as 'justice' in instances of transitions, youth empowerment, or incorporating Indigenous People and knowledge systems). In this regard, the pursuit of gender mainstreaming, despite its critics and challenges, offers a well-established community of practice and an accessible "training ground" for institutions to engage with such wicked problems.

4.5 A shift in organisational culture underpins the implementation of changes required to effectively mainstream gender in climate finance mobilisation

Whilst the aforementioned aspects of gender mainstreaming pertain to practical shifts in institutional policy and practice, there is an aspect of gender mainstreaming that is also normative in nature. The normative nature of gender mainstreaming reflects a commitment to challenging gender-based discrimination and promoting gender equality as a core value and principle of social justice. As [31] note, gender mainstreaming involves "an intentional, explicit and systematic approach to integrating a gender perspective into all policies, programs, projects and activities" [31]. Similarly, [32] describes gender mainstreaming as a "normative strategy" that seeks to ensure that gender equality is central to all policy and practice rather than being considered as a separate issue [32]. It stands to reason, therefore, that for gender mainstreaming to be fully realised, not only in the way institutions address it on paper but also in how policies and projects are implemented in practice, some form of a shift in institutional values needs to take place.

A recently accredited DAE, which has begun to implement its first climate finance project, was able to share some valuable insights from its experience of rolling out gender mainstreaming and climate finance in practice. As gender mainstreaming progresses from theoretical to practical and begins to impact people's roles and functions at different levels of the institution, people begin to question why this is the case and the necessity for such far-reaching changes. Additionally, whilst colleagues are increasingly becoming more aware of what gender mainstreaming is, many still "confuse it with feminist activism" in the workplace, as opposed to being about equality across all genders and enhancing the developmental impact of investments. For example, during the gap analyses, one policy included only risks and opportunities for women, with no specifications being made to the unique gender concerns for men (for example, as likely being primarily affected in certain decarbonisation/transition activities in male-dominated industries like mining and transport). Alternatively, other policies had aspects of "gender mainstreaming" preoccupied with relatively trivial issues like limiting employee fraternisation rather than more substantive safeguards or empowerment. Others see it as something external to the ordinary business of the institution and something that is being done to satisfy funders' requirements solely for "getting money".

DBSA attribute the success of their steadfast gender mainstreaming progress to how the CEO promoted the necessary changes as part of a broader cultural shift within the institution. They described this as "the shift from seeing ourselves as bankers to seeing ourselves as development practitioners". DBSA has given practical effect to this cultural shift in several ways. Starting with the inclusion of gender mainstreaming within the CEO's mandate and the "corporate performance cards" (i.e. KPIs) for executives newly delegated with various gender mainstreaming responsibilities. In support of this approach, DBSA has adopted four strategic pillars of gender mainstreaming and has allocated an executive "sponsor" to each of these pillars to ensure implementation. These mandates trickle down further as all new DBSA projects are now assigned with a gender mainstreaming lead from the outset. In further promoting the institutionalisation of gender mainstreaming as part of the organisation's culture, DBSA has ensured that training processes include both operational staff and executives. These functional changes speak to gender mainstreaming being promoted as part of the core value system of the institution and bode well for the operationalisation of other intangible concepts (like just transitions) in the future.

4.6 Distinguishing strategic approaches to mainstreaming gender for climate finance mobilisation

Through our research, we have distinguished two different strategic approaches to undertaking the significant volume of changes required to institutionalise the various components of gender mainstreaming into practice. These are the complete overhaul approach, and the iterative changes approach. There are benefits and challenges associated with either approach.

4.6.1 The "complete overhaul approach". The complete overhaul attempts to develop and implement, in one coordinated process, all the necessary components to institutionalise gender mainstreaming in practice. At its purist, this approach seeks to put newly developed policies and procedures in place, make foundational changes to organisational structures, and develop the necessary capacity before applying for GCF accreditation. Where this approach takes a tremendous amount of time and effort to convince, coordinate and capacitate across the organisation, it has the potential of yielding a more thoroughly integrated outcome where the extensive nexus of interactions between various business functions have been foreseen and planned for in advance. This integrated approach has the benefit of meeting the requirements of funders such as the GCF (i.e. accreditation without conditionalities) and ensuring that staff understand their newly evolved roles and functions from the outset. However, with this approach, the volume of change scoped from the outset can intimidate staff and requires careful change management considerations. There is a risk that staff do not fully understand why these changes are necessary and perceive the added administrative burden and responsibilities as overwhelming. The period for effecting such far-reaching changes can further build on these feelings, leading to burnout or apathy around the process. As described above, engaging external specialists to assist this process poses additional risks to institutions, particularly if these institutions lack the expertise or capacity to manage consultant performance and outputs.

4.6.2 The "iterative changes approach". The iterative changes approach is more pragmatic than the complete overhaul approach. Establishing a standalone gender policy, specifically applicable to GCF funded projects (once accredited or in partnership with an accredited entity), is faster and generally less imposing to those who are concerned with the implications of more broadscale changes. Attaining buy-in for the application of new policies and procedures in the limited context of GCF projects provides a sandbox in which the organisation can test the functionality of new policies and procedures, adapting them as they learn, and slowly paving the way for the eventual application of gender mainstreaming provisions to all future investments. The requirements for GCF accreditation can be met through a limited number of changes to the broader suite of institutional policies and procedures. Once the accreditation hurdle has been overcome, further policy provisions and procedures can be developed. In developing the first GCF funded project proposal, institutions encounter gaps in their frameworks and act rapidly to cover these. Similarly, other gaps may be revealed at project implementation that can be addressed in practice. This approach enables learning by doing and provides practical examples for staff to orientate around as they make necessary changes and develop necessary capabilities.

The challenge with this approach is that institutions may run into unforeseen and unplanned complexity where operative functions are required to interact with one another in practice in new, unplanned ways. Ultimately this can lead to frustration and delays in the process, which may present various risks, including financial and reputational risks. The transaction costs of the iterative changes approach can thus be high if not managed properly. Managing expectations and interactions can be challenging, requiring both strong leadership and flexibility amongst staff to learn, work together, and make changes "on the job". Iterative changes may also lack the inertia of a complete overhaul, with mainstreaming stalling with "good enough" revisions—for example, in the gap analyses, one institution's gender policy, whilst promising, had not been mainstreamed across the rest of the institution's suite of policies and protocols, thus hindering its implementation and operationalisation. The experience of study participants indicates that, given the novelty of climate finance and gender mainstreaming, for most institutions, the levels of understanding and capability amongst leaders are still relatively low, which does not bode well for maintaining inertia.

Given that benefits and challenges are associated with either approach, it is less critical which approach is selected and more important that institutions think about which approach they wish to adopt and develop a strategic plan to implement that approach in a coordinated manner. Developing a strategic approach from this level of awareness has the most potential for yielding positive outcomes with regard to expectation management, buy-in, acculturation and the adoption of the normative basis for gender mainstreaming across the organisation.

4.6.3 Partnership approaches promote learning by doing and enable the establishment of a track record of implementation. Our research has further revealed the benefits that accrue from adopting a partnership approach that promotes learning by doing and enables the building of a track record of gender mainstreaming. Partnership approaches yield some benefits of the iterative changes approach with reduced risks. Study institutions that are successfully mobilising climate finance point to establishing strategic partnerships for developing and delivering projects as an important low-hanging fruit. For entities with little to no climate finance experience, partnering with experienced, already accredited entities on joint projects presents an opportunity to begin to navigate the complex nexus of institutional changes in a practical manner that is both low-risk and incurs low transaction costs. The partnership approach also serves to acculturate the institution to operate with an external gender lens. It can expose different operating functions of the business to gender mainstreaming activities without wholesale changes to existing policies and procedures that can be seen as intimidating. It allows for external-facing gender policies and procedures to be developed and tested in a "sandbox" setting before being applied more generally to the institution's portfolio of investments. International and regional accredited GCF entities are good potential partners as they can operate across multiple countries and generally have deep experience in climate finance projects. The benchmarking of accredited or successful neighbour institutions can also support gender champions in advocating for sceptics and dissidents in their organisations. It is further possible, where available, to partner with other already accredited entities in the country.

Pursuing strategic partnerships has the added advantage of allowing an institution to build a track record of gender mainstreaming in climate projects to support any future accreditation applications to climate finance funds. Study institutions reference this kind of experience as a critical factor influencing the successful outcomes of their accreditation process (CRDB,personal communication, 2023; DBSA, personal communication, 2023). Furthermore, partnerships can be utilised for already accredited entities to test new ideas, such as DBSA newly partnering with UN Women to develop innovative Gender Bonds (DBSA, personal communication, 2023).

5. Conclusion

Climate finance, and particularly the GCF's Gender Policy is proving to be an effective lever for advancing the integration of gender mainstreaming in the practices of financial institutions. The integration of gender-responsive practices through the pursuit of climate finance mobilisation is presenting a leading edge for the mainstreaming of critical aspects of the social sciences into the practices not only of development finance institutions, but also the practices of commercial finance entities who have otherwise had little exposure to these dynamics of social sciences.

Our research reveals that the mainstreaming of social sciences through the pursuit of gender-responsive strategies, policies, and practices, is not a purely technical exercise but one that also involves a normative shift that should be addressed from the perspective of organisational values and culture. Doing so involves inculcating a sense of purpose amongst financial practitioners that moves beyond the measurement of personal and portfolio performance only by commercial metrics such as return of investment, and rather promotes a holistic, and human-centric approach that values the multiplicity of dimensions associated with increasing human well-being.

One of the key aspects of this culture shift is the recognition that achieving transformative social impacts in development finance is predicated on the design and implementation of projects that not only account for existing vulnerabilities but also seek to identify and maximise existing opportunities. Therefore, the design of development finance projects need to manage social risks and critically maximise opportunities for transformative impact by identifying and supporting all groups within society to act as agents for positive social change. This opportunities focussed approach is underscored by a shift in organisational culture promoted within the roles, responsibilities, and KPIs that ultimately inform practice.

Leaders in institutions seeking to mobilise development finance stand to benefit significantly from understanding what the foundational components for institutionalising gender mainstreaming are and from adopting strategic approaches that enable them to effectively navigate the opportunities and challenges that these complex changes present to their organisations. In particular, leaders stand to benefit from understanding how to undertake these complex changes whilst minimising risks and associated transaction costs. The experiences of institutions in southern Africa pursuing GCF accreditation and implementation reveal several foundational components to institutionalising gender mainstreaming. They further demonstrate several strategic approaches that other organisations can draw from to inform their chosen pathway towards gender mainstreaming.

Lastly, our research has revealed that entities exploring this novel area of practice benefits greatly from cooperation. Knowledge-based partnerships and project-based partnerships offer significant opportunities for institutions to collectively advance their goals of mobilising development finance and, critically, contribute to the ability of institutions to maximise the transformative impact potential climate finance holds for their countries.

These findings add to the growing body of knowledge on institutionalising social science practices and, in particular, adopting strategic approaches that can scale the impact of efforts to mobilise climate finance in developing countries.

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References

1. UNDP (United Nations Development Programme). A framework for enhancing gender and poverty integration in climate finance. UNDP NDC Support programme and strengthening governance of climate change finance programme. 2021. Available from: https://www.undp.org/sites/g/files/zskgke326/files/2021-12/UNDP-A-Framework-for-Enhancing-Gender-and-Poverty-Integration-in-Climate-Finance_0.pdf.
2. Rosenstein-Rodan, Paul N. Problems of Industrialisation of Eastern and South-Eastern Europe. The Economic Journal. 1943. 53(210/211): 202–211.
3. Rostow, Walt W. The Stages of Economic Growth. A Non-Communist Manifesto, Cambridge. Cambridge University Press. 1960.
4. Alacevich M. The Making of Development Economics: Paul Rosenstein-Rodan and the birth of Development Economics. Global Economic Governance Initiative Working Paper 029. 06/2019. Available from: https://www.bu.edu/gdp/files/2019/07/Alacevich-Final-WP-072019-2.pdf.
5. Sen A. *Development as Freedom*. New York: Alfred A. Knopf. 1999.
6. McNeill D. Human Development: The Power of the Idea1. Journal of Human Development, 2007. 8(1) 5–22. Available from: https://doi.org/10.1080/14649880601101366
7. O'Hearn D. Amartya Sen's Development as Freedom: Ten years later. *Policy and Practice*: A Development Education Review. 2009. Vol 8,9–5.
8. Telleria J. Defining and Measuring Human Development: A Genealogical Analysis of the UNDP's Human Development Reports. *The European Journal of Dev Res* 2022. 35 520–544. Available from: https://doi.org/10.1057/s41287-022-00516-2
9. Kanbur R. Poverty and Development: The Human Development Report (1990), and the World Development Report (1990). In: van der Hoeven R., Anker R. (eds) Poverty Monitoring: An International Concern. Palgrave Macmillan, London. 1994. Available from: https://link.springer.com/chapter/10.1007/978-1-349-23134-8_5.
10. Vanclay F. and Esteves A. M. Current issues and trends in social impact assessment. New Directions in Social Impact Assessment: Conceptual and Methodological Advances. 2011. 3–19.
11. Miller P. IFC Performance Standards. Paper presented at the SPE International Health, Safety & Environment Conference, Abu Dhabi, UAE, April 2006. Available from: https://doi.org/10.2118/98840-MS.
12. Götzmann N and Bainton N. 2021. "Embedding gender-responsive approaches in impact assessment and management" *Impact Assessment and Project Appraisal* 39(3), 171–182.
13. United Nations Women. African women to play key roles in mitigating impacts of climate change. 2022. Available from: https://www.unwomen.org/en/news-stories/news/2022/03/african-women-to-play-key-roles-in-mitigating-impacts-of-climate-change.
14. UNDP (United Nations Development Programme). Reducing disaster risk: A challenge for development. Human Development Report 2002.

15. UNDP (United Nations Development Programme). Gender-responsive climate finance: Exploring opportunities for transformative change. 2015.
16. GCF (Green Climate Fund). Updated Gender Policy and Action Plan 2018–2020. 2018. Available from: https://www.greenclimate.fund/sites/default/files/document/gcf-b21-02.pdf.
17. WEDO & CDKN. Guide to strengthening gender integration in climate finance projects. 2021. Available from: https://wedo.org/wp-content/uploads/2021/11/Guide-to-strengthening-gender-integration-into-climate-finance-projects_WEDO_CDKN_11.21.pdf.
18. GCF (Green Climate Fund). Annex IV: accreditation framework of the GCF. 2020. Available from: https://www.greenclimate.fund/sites/default/files/decision/b31/decision-b31-06-b31-a04.pdf.
19. Schalatek L. and Zuckerman E. More than an add-on? Evaluating the integration of gender in Green Climate Fund projects and programs. Heinrich Boll Foundation, Washington DC. 2021. Available from: https://us.boell.org/sites/default/files/2021-10/hbs%20Washington_Gender%20Action_More%20than%20an%20add-on_Evaluating%20integration%20of%20gender%20in%20Green%20Climate%20Fund%20projects%20and%20programs.pdf.
20. GCF (Green Climate Fund). Mainstreaming gender in Green Climate Fund projects: *A practical manual to support the integration of gender equality in climate change intervention and climate finance*. 1st Ed. Green Climate Fund: Songdo International Business District. 2017.
21. WOCAN (Women Organisation for Change in Agriculture and Natural Resource Management). Gender and Climate finance sourcebook: A handbook for building partnerships. 2020. Available from: https://www.wocan.org/wp-content/uploads/Gender-and-Climate-Finance-Sourcebook1.pdf.
22. AFB (Adaptation Fund Board). Assessment Report on Progress in the Implementation of the Adaptation Policy and Gender Action Plan. 2019. AFB/B.34/Inf.9. Available from: https://www.adaptation-fund.org/wp-content/uploads/2019/10/AFB.B.34.Inf_.9_Assessment-report-on-progress-in-the-implementation-of-the-Adaptation-Funds-Gender-Policy-and-Gender-Action-Plan_final_ready-for-posting1.pdf.
23. GCF (Green Climate Fund). Gender action plan of the GCF 2020–2023. 2019. Available from: https://www.greenclimate.fund/sites/default/files/document/gender-action-plan.pdf.
24. Stephenson M.A. A guide to gender-responsive budgeting. Women's Budget Group. 2018. Available from: https://oxfamilibrary.openrepository.com/bitstream/handle/10546/620429/gt-guide-gender-responsive-budgeting-280218-en.pdf;jsessionid=720E7D29B83B201114A126155C60A23A?sequence=13.
25. OECD (Organisation for Economic Cooperations and Development). Gender budgeting in OECD countries: *OECD journal on budgeting*. 2016 3.
26. CABRI (Collaborative Africa Budget Reform Initiative), IBP (International Budget Partnership), IIED (International Institute for Environment and Development) and UNDP (United Nations Development Programme). Opportunities for coordinating and integration of gender and climate change into budgeting and finance. 2021. Available from: https://www.cabri-sbo.org/uploads/files/Documents/CABRI-Policy-Brief-Climate-change-financining-English.pdf.
27. United Nations Framework Convention on Climate Change (UNFCCC). Implementation of gender-responsive climate action in the context of sustainable development. Report of the Expert Group Meeting. Germany. 2015.
28. GCF (Green Climate Fund). IRM Gender Strategy Note (revised in March 2022). 2022. Available from: https://irm.greenclimate.fund/sites/default/files/document/irm-gender-strategy-note-march-2022.pdf.
29. OECD (Organisation for Economic Cooperation and Development). Development finance for gender-responsive climate action". OECD *Development Cooperation Directorate*. Paris: OECD Publishing. 2022. Available from: https://www.oecd.org/dac/development-finance-gender-climate-action.pdf.
30. United Nations Development Programme (UNDP). Overview of linkages between gender and climate change" Training module. 2016. Available from: https://www.undp.org/sites/g/files/zskgke326/files/publications/Gender_Climate_Change_Training%20Module%201%20Overview.pdf.
31. Moser C.O.N. and Clark F.C. *Victims, Perpetrators and Actors?: Gender, armed conflict and political violence*. London and New York: Zed Books Ltd. 2001.
32. Walby S. Gender Mainstreaming: productive tensions in theory and practice". *Social Politics: International Studies in Gender, State and Society*, 2005. 3:321–343.