Towards Effective and Inclusive Research Frameworks in Sub-Saharan Africa

Synthesis Report

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Executive Summary

This synthesis report presents an analysis of the integration and promotion of inclusivity – with a particular focus on gender equality, youth inclusion, and marginalized groups – within research and innovation projects supported by Science Granting Councils (SGCs) under the Research and Innovation Management (RIM) project. Implemented by a consortium led by the African Centre for Technology Studies (ACTS) in collaboration with the Association of African Universities (AAU) and University of Cheikh Anta Diop (UCAD), the RIM project is part of the broader Science Granting Councils Initiative (SGCI) aimed at enhancing the capacities of national councils to fund, manage, and learn from research and innovation projects in Sub-Saharan Africa.

Drawing from technical reports and documentation across participating councils, this synthesis reviews how inclusivity has been mainstreamed across projects. The report reviews the funded projects, assesses alignment with national and continental development agendas, and examines the extent to which inclusivity considerations have shaped research priorities and outcomes.

Many SGCs have taken significant steps to embed gender equality and inclusion (GEI) frameworks within their operational guidelines and funding criteria. While inclusivity is increasingly recognized as a critical aspect of research management, the degree of integration varies. Some councils have developed robust systems for ensuring gender responsiveness in project selection and evaluation, while others are at earlier stages of implementation. Key challenges include limited technical capacity to assess inclusivity metrics, lack of consistent monitoring tools, and inadequate funding earmarked for gender-responsive or inclusive research. There is a need for sustained capacity strengthening and knowledge sharing among councils. Several funded projects demonstrated strong alignment with inclusive development objectives, including research focused on women and youth empowerment, vulnerable communities, and marginalized populations. The following are the recommendations that emerged from the synthesis;

1. Strengthen tools and indicators for measuring inclusivity across the research and innovation funding cycle.
2. Build capacities of SGC staff and stakeholders through targeted training on inclusive research design, ethical considerations, and gender analysis.
3. Facilitate peer learning among councils to share best practices, tools, and case studies on mainstreaming inclusivity.
4. Enhance data systems for better monitoring, evaluation, and reporting on gender and inclusivity outcomes.
5. By consolidating evidence on inclusive practices and outcomes, this synthesis contributes to deepening the learning agenda of SGCI, supporting more equitable research ecosystems, and guiding strategic funding decisions for transformative and inclusive development.

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Through SGCI, the IDRC consortium has advanced the pursuit of a more equal and inclusive research and innovation ecosystem in Sub-Saharan Africa under the RIM project – an endeavor of significant importance.

Finally, we express our gratitude to the ACTS team – particularly those directly involved in the RIM project – for their dedication and support in its implementation.

Abbreviations

AI	Artificial Intelligence
IRD	Institut de recherche pour le développement
ISRA	Institut Sénégalais de Recherches Agricoles
NARDI	National Agricultural Research and Development Institute
RAB	Rwanda Agriculture and Animal Resources Development Board
RIM	Research and Innovation Management (project)
S&CD	Social and Community Development
SGC	Science Granting Council
SGCI	Science Granting Councils Initiative
STI	Science, Technology, and Innovation
UCAD	Université Cheikh Anta Diop
USSEIN	Université du Sine Saloum El-Hâdj Ibrahima NIASS
VDC	Village Development Committee

1. Background and Context

Inclusivity in research and innovation is increasingly recognized as a fundamental pillar for achieving equitable and sustainable development. It ensures that research priorities reflect the diverse needs of society, that marginalized voices such as women, youth, persons with disabilities, and rural populations are represented and addressed, and that research outcomes contribute to reducing inequalities. However, while efforts to promote inclusivity are underway, their integration into institutional systems and funding mechanisms varies widely across national contexts.

This synthesis report on inclusivity responds to the need to document and analyze how SGCs and beneficiaries through support from the RIM project, are advancing the inclusivity agenda. It collates evidence from secondary sources, including technical reports and project documentation from multiple countries, to assess the degree to which inclusivity has been embedded into funded projects and institutional practices. The synthesis offers insights into progress made, challenges encountered, and promising practices that can inform future strategies for more inclusive research and innovation systems in Africa. This synthesis also aims to enhance visibility of the councils' efforts, inform evidence-based decision-making, and support the development of more inclusive, impactful, and responsive research funding frameworks.

2. Inclusivity in RIM-funded Projects and SGCI Activities

Inclusivity in Science, Technology, and Innovation (STI) is increasingly recognized as a critical driver for achieving equitable and sustainable development. An inclusive STI system ensures that the benefits of research and innovation are accessible to all parts of society, particularly marginalized and underrepresented groups such as women, youth, persons with disabilities, and rural communities. It also promotes diversity in knowledge production by enabling participation from a wide range of actors with different perspectives, experiences, and needs. In the African context, where structural inequalities persist across gender, geographic, and socioeconomic lines, mainstreaming inclusivity in STI is essential for fostering innovation that is not only scientifically robust but also socially relevant and transformative. This section of the report explores how inclusivity has been conceptualized and implemented across RIM-supported projects as shown in Table 1 below.

Table 1: Inclusivity approaches in specific RIM funded projects

Benecifiary name	Project title	Inclusivity approach
Innov8 Hub, Nigeria	Development of affordable and reliable electricity access for rural healthcare facilities in Northern Nigeria	During the market validation, gender inclusivity was prioritized to ensure that the perspectives and needs of both male and female healthcare workers were taken into account. Efforts were made to engage both genders equally, ensuring that the survey and feedback processes were accessible and welcoming to all participants. This helped ensure the voices of women, who may be underrepresented in some communities, were heard, particularly in rural healthcare settings where women often play a critical role in medical service delivery.
University of Zimbabwe	Developing a Two-Sided Artificial Intelligence Risk Predictive Model for Early Identification of High-Risk Antenatal Mothers: Enhancing Maternal and Neonatal Health Outcomes in Zambia, Malawi, and Zimbabwe.	The project collected data from diverse socio-economic backgrounds and rural and urban settings to ensure that the Artificial Intelligence (AI) model was inclusive and representative of the entire population. This approach helped in identifying and addressing the unique challenges faced by different communities.
Uganda Christian University, Uganda	Establishing a small scale food waste up-cycling facility for cricket feed production and marketing in Kampala	The project team engendered the data collection tools and recruited a gender specialist to ensure that gender issues were catered for.
Higher Normal School, Cote De Ivoire	Genetic characterization of hybrids resulting from the cross between Tilapia guineensis (Günther, 1862) and Tilapia zillii (Gervais, 1848) in two sectors (IV and V) of the Ebrié lagoon	The scientific team of this project consisted of five (05) women and one (01) man and is led by Dr. KONE Naminata épouse YEO.
Njala University, Sierra Leone	Incorporating drone and AI technologies for cost-effective vector controls in Sierra Leone	To enhance inclusivity and ensure broader participation of underrepresented groups in future project phases, the project team implemented targeted strategies to promote gender diversity and community involvement. Additionally, they engaged local women's groups and community organizations to facilitate their involvement in malaria intervention strategies and decision-making processes. To further promote diversity, they planned to establish internship and mentorship programs, creating opportunities for underrepresented groups to gain technical skills and research experience. These initiatives contributed to building a more inclusive and sustainable workforce for future technology-driven health interventions.
Makerere University, Uganda	Maize germ and bran as raw materials for high fibre value added bakery and confectionery products	The project has so far recruited three female and one male student to undertake the research. Generally, the baking sector is dominated by women, so gender sensitivity was exercised to include more men in the project activities e.g. in training and consumer surveys

Benecifiary name	Project title	Inclusivity approach
Rwanda Agriculture and Animal Resources Development Board (RAB), Rwanda	Scaling up the production and use of biological control products (entomopathogenic nematodes) for improved food security, safety and nutrition	Gender inclusivity was applied during proposal development and implementation. Teams included balanced participation (4 women, 3 men) across research, technical, and support staff
University of Embu, Kenya	A digital intervention for the prevention and early detection of depression and suicide among the youth in Kenya	The mental health project is actively promoting gender equality and inclusivity through various ways: Inclusive Outreach and Support: The project ensures that its mental health resources and interventions are accessible to individuals of all genders. For example, the mental health app includes features and content that address diverse gender identities and experiences, ensuring that everyone feels represented and supported. Gender-Sensitive Content: The project incorporates gender-sensitive content into its application icon and educational materials.
NUTRIFARM LTD, Kigali-Rwanda	Rwanda cricket farming project	Female constituted 60% of the research team
Simon Diedong Dombo University of Business and Integrated Development Studies	The impact of agribusiness incubation/ innovation hubs on youth agripreneurship development and lessons for Ghana's agro-food industrial transformation	Gender inclusivity and equality was promoted at all levels of the project implementation. In designing the focus group discussion guide and survey tool for the beneficiaries, considerations were given to capture the gender dimensions of the activities of the innovation hubs - the number of people trained, total staff strength and number of marginalised people reached with interventions based on gender. The team also adopted a gender-neutral position in framing the research questions. In recruiting the enumerators and supervisors for the field data collection, gender considerations were made. For instance, of the nine enumerators selected, four were female and five were male.
National Agricultural Research and Development Institute (NARDI), Botswana	Processing of goat milk into yoghurt enriched with Moringa leaf extracts and Marula pulp to improve nutrition, health and food safety	Before the inception of the project, an intensive sensitization and consultations were made with leaders in the area. Those consulted and sensitized included Bogosi Village Development Committee (VDC), councillors, Member of Parliament, village extension teams, social and community development office. Background search was also carried out to profile challenges to previous projects. About 30% of the project team are women in science while 50% of the project beneficiaries are women; the youth makes 50% of the beneficiaries. During the selection of beneficiaries the Social and Community Development (S&CD) office was deliberately given one slot to select one female youth from their database who is also living under the poverty datum line.
Université Cheikh Anta Diop (UCAD), Senegal	Valorization of neglected and underutilized edible tiger nut (Cyperus esculentus L., Ndir) for improving food and nutritional security in Senegal (vandirsan)	The team is composed of 67% women and 33% men who are teacher-researchers (4) and researchers (2) who work in different research and higher education institutions in Senegal Université Cheikh Anta Diop (UCAD), Institut Sénégalais de Recherches Agricoles (ISRA), Université du Sine Saloum El-Hâdj Ibrahima NIASS (USSEIN) and Institut de recherche pour le développement (IRD) - Senegal The vulnerable sectors of society including women were taken into account in this project in the same way as other members of society.

3. Key insights on inclusivity in RIM projects

Inclusivity has been a central pillar in the design and implementation of RIM projects, with several deliberate strategies adopted to ensure representation, equity, and participation across gender, socio-economic status, and geographic location.

1. Gender-sensitive engagement and representation

Various RIM projects integrated gender inclusivity from inception. Gender considerations were incorporated into project design. For instance, in the Makerere University project, market validation exercises where both male and female healthcare workers were equally engaged to ensure their perspectives informed decision-making. In traditionally female-dominated sectors like baking, conscious efforts were made to include more men in training sessions and consumer surveys. In contrast, for sectors where women are typically underrepresented, specific strategies were adopted to promote their involvement – such as targeted recruitment and outreach to women's groups.

2. Inclusive project teams and leadership

Inclusivity was also reflected in team composition. Several projects had women as the majority in their scientific teams, with women making up to 60–67% in some cases, and in one example, the project was led by a female principal investigator. Gender balance was considered during proposal development and staff recruitment phases across roles including researchers, technicians, and support staff.

3. Institutional and community-level inclusion

At the institutional level, gender-neutral language was adopted in research instruments, and inclusive data was collected on the number of beneficiaries trained, employed, or reached – disaggregated by gender and vulnerability. Field teams (enumerators and supervisors) were also selected with gender parity in mind. At the community level, local stakeholders, including traditional leaders and community development offices, were engaged early in the project to ensure buy-in and equitable beneficiary selection. For instance, the Social and Community Development office was assigned a dedicated slot to nominate a female youth living below the poverty line.

4. Tools and content designed for all genders

Projects targeting mental health and digital health tools developed gender-sensitive content and interfaces. Apps and educational materials were tailored to include features that cater to diverse gender identities and ensure users feel recognized and supported.

4. Conclusion

This synthesis highlights diverse and proactive approaches adopted across Africa. From gender-balanced teams and gender-sensitive research tools to equitable beneficiary selection and community-level engagement, inclusivity is not merely an add-on but a foundational element in project design and implementation.

The projects analyzed demonstrate a strong commitment to integrating inclusivity at multiple levels. Whether through targeted outreach to women's groups, recruitment of gender specialists, or ensuring rural and underrepresented communities are meaningfully engaged, the initiatives reveal the potential of inclusive research and innovation systems to generate more equitable and impactful outcomes.

However, the journey towards full inclusivity is ongoing. Continued efforts are needed to institutionalize inclusive practices, particularly in ensuring sustained participation of women, youth, and marginalized groups. Investing in inclusive leadership, mentorship, and capacity-building will be crucial for creating a robust, diverse, and future-ready STI ecosystem.

As countries and institutions scale their RIM efforts, these insights offer a roadmap for embedding inclusivity not just as a goal but as a guiding principle that shapes the culture, practices, and impacts of innovation systems.

5. Recommendations

To deepen and sustain the benefits of promoting inclusivity across RIM supported projects, the following recommendations are proposed for policymakers, funders, implementing partners, and research institutions:

1. **Institutionalize inclusive design from the outset**. Inclusive approaches should be embedded at the proposal and design phase of RIM projects. Funders and project leaders should require clear inclusivity strategies that address gender, youth, and socio-economic diversity, including rural and marginalized populations.

2. **Strengthen gender and social inclusion capacity**. Build the capacity of research teams through training on gender mainstreaming and inclusive research methodologies. Including gender specialists or social inclusion advisors as part of project teams should be standard practice.

3. **Promote equitable participation in decision-making**. Promote balanced representation in research leadership, advisory boards, and community consultation processes. This includes ensuring women, youth, and other marginalized groups are present where key decisions are made.

4. **Adopt disaggregated monitoring and evaluation frameworks**. Projects should collect, analyze, and report data disaggregated by gender, age, and other relevant social markers to track who is benefiting and participating. This will inform more targeted and responsive programming.

5. **Support inclusive skills development and mentorship**. Expand internship, mentorship, and training programs to reach underrepresented groups in science, technology, and innovation. This includes providing support mechanisms to address structural barriers to participation.

6. **Facilitate community engagement and co-design**. Deepen engagement with community-based organizations, including women's groups, youth associations, and local leadership, to co-design and implement projects that are context-sensitive and socially responsive.

7. **Promote inclusive research funding criteria**. Funding bodies should include inclusivity as a scoring criterion in calls for proposals and provide dedicated grants or incentives for projects that demonstrate innovative approaches to inclusivity.

8. **Encourage peer learning and knowledge sharing**. Encourage platforms for cross-project learning where teams can share best practices, lessons, and tools for promoting inclusion in research and innovation.

By implementing these recommendations, RIM project beneficiaries can contribute to more equitable and impactful research outcomes while also building more resilient and inclusive innovation ecosystems across Africa.

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