STRENGTHENING THE NATIONAL RESEARCH AND INNOVATION FUNDING AGENCIES IN WEST AFRICA (SRIFA)

Training Manual

2025

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TRAINING MANUAL

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IDRC · CRDI

International Development Research Centre

Centre de recherches pour le développement international

Canada

Ministry of Foreign Affairs


Research Integrity (cont)
Examples of unacceptable practices include:
Fabrication: Creating false data or research materials.


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STRENGTHENING THE NATIONAL RESEARCH AND INNOVATION FUNDING AGENCIES IN WEST AFRICA (SRIFA)


Strengthening the National Research and Innovation Funding Agencies in West Africa (SRIFA)

The African Technology Policy Studies Network (ATPS) is a transdisciplinary network of researchers, policymakers, private sector actors, and the civil society promoting the generation, dissemination, use, and mastery of Science, Technology, and Innovations (STI) for African development, environmental sustainability, and global inclusion. In collaboration with like-minded institutions, ATPS provides platforms for regional and international research and knowledge sharing to build Africa's capabilities in STI policy research, policymaking, and implementation for sustainable development.

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About the SRIFA Project

The Science Granting Councils (the Councils) play critical and strategic roles in supporting research and innovation that contribute to the social and economic development of any country. As a creation of the law, the Councils are charged with the responsibility of research funding, quality assurance, policy and decision-making, knowledge exchange, and training/capacity building of the science system actors to ensure that outputs from the research and innovation endeavours are used to inform policy and practice. Given this important role, and in view of the dynamic nature of research and innovation developments, their capacity to perform these responsibilities to achieve desired goals needs to be continuously strengthened. In recognition of this need, the Science Granting Councils Initiative (SGCI) in sub-Saharan Africa (SSA) is providing support that will strengthen the national research and innovation funding agencies in West Africa.

Compared to other regions in Africa, only a few countries in West Africa have established agencies responsible for research and innovation funding. There is now a deliberate effort by the SGCI to strengthen the national research and innovation funding agencies where they already exist (Burkina Faso, Senegal, and Côte d'Ivoire) to improve their performances as well as support the development of institutional frameworks/mechanisms for the development of new research and innovation funding agencies in countries where they do not currently exist (Ghana, Nigeria, and Sierra Leone). It is based on this timely opportunity provided by the SGCI that the African Technology Policy Studies Network (ATPS) and its partner, the African University of Science and Technology (AUST) proposed to work together in a joined-up approach with other Collaborating Technical Agencies (CTAs) to deliver on the project titled: "Strengthening the National Research and Innovation Funding Agencies in West Africa (SRIFA)".

The aim is to provide the requisite training and technical support to strengthen the national research and innovation funding agencies or their equivalents in the six participating West African countries. The project goal is to strengthen the agencies where they already exist to efficiently deliver on their mandates and support the development of institutional frameworks/mechanisms for establishing new research funding agencies where they do not exist. With support from the Science Granting Councils Initiative (SGCI), the UK's Foreign Commonwealth Development Office (FCDO), the South Africa's National Research Foundation (NRF), the Swedish International Development Cooperation Agency (SIDA), the German Research Foundation (DFG), and the Norwegian Agency for Development Cooperation (Norad), the SRIFA Project, therefore, aims to provide training and technical support to strengthen these national agencies to achieve their mandates, especially in areas such as monitoring research projects, financial reporting, institutional risk assessment, institutional communications capacity, mainstreaming gender in granting, Council internal processes, and using research results to inform government policy and private sector practice.

About the Training Manual

The African Technology Policy Studies Network (ATPS) Strengthening the National Research and Innovation Funding Agencies in West Africa (SRIFA) Training Manual is designed to equip Research and Innovation Funding Councils ("the Councils") with the skills, strategies, and tools needed to enhance their effectiveness, sustainability, and impact. Recognizing the central role of research and innovation in driving socio-economic development, the manual responds to the pressing challenges these Councils face, including limited resources, technical capacity gaps, complex donor systems, and the need for sustainable funding ecosystems.

The manual is structured into six comprehensive modules:

1. **Fundraising and Grantsmanship:** Provides practical guidance on identifying funding opportunities, developing competitive proposals, forming strategic partnerships, diversifying funding streams, managing and disbursing grants, and integrating Monitoring, Evaluation, and Learning (MEL) mechanisms.
2. **Public-Private Partnerships (PPPs):** Equips participants with the knowledge to design, negotiate, and manage effective PPPs that leverage the strengths of the public sector, private enterprises, and civil society. The module emphasizes equitable collaboration, transparent governance, adaptive management, and MEL integration.
3. **Commercialization of Research Results:** Guides Councils through the commercialization process, including technology transfer, intellectual property (IP) management, licensing, market evaluation, and legal considerations. It outlines pathways such as licensing, spin-offs, joint ventures, franchising, and in-house production, tailored to West African realities.

4. **Gender Equality and Social Inclusion (GESI) Strategies:** Offers frameworks for mainstreaming GESI principles into Council operations and funding processes. It addresses unconscious bias, promotes inclusive leadership, and provides tools for gender-responsive funding calls, institutional reforms, and sustained equity outcomes.
5. **Research Ethics and Integrity:** Strengthens Councils' capacity to uphold ethical standards in research funding and oversight. Topics include guiding ethical principles, ethics review processes, managing ethical risks, promoting integrity, and institutionalizing oversight mechanisms.
6. **Policy Influence and Advocacy:** Provides research and innovation funding Councils with the knowledge, tools, and strategies to translate research evidence into actionable policies, engage stakeholders effectively, and advocate for reforms that strengthen their role in shaping national and regional development agendas.

Each module combines technical knowledge with interactive methodologies, such as case studies, group exercises, simulations, and tool-based demonstrations, to ensure learning is context-specific and action-oriented. By the end of the program, participants will be able to mobilize resources more effectively, enhance inclusive and impactful partnerships, commercialize research outputs responsibly, integrate equity in operations, and uphold the highest ethical standards. The ATPS SRIFA Training Manual is both a reference and a capacity-building resource. It supports the long-term vision of creating resilient, innovative, and well-governed research funding systems in West Africa, capable of catalyzing transformative development outcomes across the region.

Introduction

Research and innovation are foundational drivers of socio-economic transformation, competitiveness, and sustainable development. In West Africa, Research and Innovation Funding Councils ("the Councils") serve as critical enablers by mobilizing resources, disbursing grants, and shaping national research agendas. Yet, these Councils face persistent systemic challenges, including limited fiscal space, fragmented institutional frameworks, insufficient technical capacity, and complex donor landscapes. Such constraints weaken their ability to deliver on mandates, scale impact, and sustain funding ecosystems.

The ATPS Strengthening the National Research and Innovation Funding Agencies in West Africa (SRIFA) Training Manual directly responds to these challenges by equipping Councils with advanced tools, models, and governance strategies that enhance resource mobilization, optimize partnerships, mainstream equity, commercialize research outputs, and uphold the highest standards of ethics and integrity. Unlike generic capacity-building programs, this manual integrates technical rigor with context-specific applications. It combines evidence-based frameworks, such as the Quadruple Helix model, Theory of Change, and Monitoring, Evaluation, and Learning (MEL) systems, with West African case studies and simulation-based exercises to ensure actionable learning.

By engaging with this manual, participants will strengthen institutional resilience, increase success rates in competitive funding, enhance impactful cross-sector collaborations, and embed research within national and regional policy processes. Ultimately, SRIFA aims to create a cohort of technically proficient, strategically oriented Councils capable of catalyzing innovation ecosystems and driving transformative development outcomes across West Africa.

MODULE ONE:

FUNDRAISING AND GRANTSMANSHIP

This module introduces the foundational skills and strategies required for successful fundraising and grantsmanship. It covers how research and innovation actors can identify funding opportunities, craft compelling proposals, build donor relationships, and align their goals with funder priorities. The focus is on equipping participants with practical tools to secure and manage grants effectively within the West African research and innovation ecosystem.

Module Overview

Category	Summary
Objectives	Equip participants with skills to: Identify and secure funding opportunities. Develop competitive proposals aligned with funder priorities. Build strategic partnerships and diversify funding sources. Strengthen grant management and MEL systems.
Duration	Approx. 8 hours total (4 units @ 1.5–2 hours each)
Key Topics	Competitive proposal development. - Strategic partnerships (Quadruple Helix model).- Funding diversification.- Effective grant management.- MEL integration in the grant cycle.
Target Participants	Senior and mid-level staff of Research & Innovation Funding Councils, grants officers, MEL specialists, and partnership managers.
Expected Outcomes	Participants produce high-quality, funder-aligned proposals.- Councils diversify funding streams and strengthen partner networks.- Internal systems for grant management and MEL are established or improved.- Measurable improvement in grant success rates.

Training Objectives: By the end of this training, participants should be able to:

1.	Develop competitive proposals that attract national and international funding.
2.	Promote strategic partnerships and funding diversification.
3.	Build internal capabilities to manage and disburse grants effectively.
4.	Strengthen monitoring, evaluation and learning (MEL) mechanisms.

Training Outcomes: The expected training Outcomes of this Module Include:

1.	Participants can design and submit competitive, high-quality proposals aligned with funder priorities and national development goals.
2.	Participants demonstrate the ability to identify and engage diverse funding partners using the Quadruple Helix model.
3.	Councils establish or strengthen internal grant management systems, including governance, budgeting, and reporting structures.
4.	Participants develop and apply MEL frameworks within the grant lifecycle, linking activities to measurable outcomes and sustainability strategies.

Facilitation Methods and Procedures

1. Session Flow

a. **Opening (10 mins):** Welcome participants, introduce the unit, and highlight the importance of fundraising skills for researchers in West Africa.

b. **Icebreaker (10 mins):** Ask participants to share their most recent attempt to get funding and the outcome.

c. **Core Presentation (40 mins):** Cover key fundraising concepts, identifying funding opportunities, writing winning proposals, and managing donor relationships.

d. **Case Study Discussion (20 mins):** Review a successful grant proposal from the region, highlighting strengths.

e. **Group Activity (30 mins):** In teams, draft a one-page concept note based on a given research idea.

f. **Wrap-Up (10 mins):** Summarize key takeaways, answer questions, and assign follow-up exercises.

2. Key Discussion Points

a. Understanding the funding landscape in West Africa.

b. How to match research ideas to funder priorities.

c. Proposal writing best practices.

d. Common reasons for grant rejection.

e. Building long-term funder relationships.

3. **Activities & Exercises**

a. **Concept Note Writing:** Teams prepare a short concept note for peer review.

b. **Funder Matching:** Match sample research topics to relevant funding opportunities.

4. **Facilitation Tips**

a. Use real examples from local or regional projects.

b. Encourage knowledge sharing between experienced and less experienced participants.

c. Keep discussions solution-oriented when sharing past grant failures.

5. **Potential Challenges & Solutions**

a. **Challenge:** Participants may feel discouraged by past rejections.
Solution: Share success stories and stress the learning process.

b. **Challenge:** Overly theoretical discussion.
Solution: Use practical examples and interactive exercises.

Training Content
Below are the study units under this module:

Unit 1.1: Developing Competitive Proposals for National and International Funding

Unit 1.2: Strategic Partnerships and Funding Diversification

Unit 1.3: Managing and Disbursing Grants Effectively

Unit 1.4: Strengthening Monitoring, Evaluation, and Learning (MEL) Mechanisms

Unit 1.1: Developing Competitive Proposals for National and International Funding

Session Duration: 2 hours

Format: Interactive lecture, group simulation, tool-based demonstration (e.g., funder analysis matrix)

Creating compelling proposals is crucial for securing sustainable funding from a diverse range of sources. For research and innovation funding Councils, competitive proposals should reflect a clear vision, technical depth, strategic alignment, and a measurable impact. The following key steps should be taken in developing competitive proposals:

1. **Understand the Funder and Their Priorities:** Before starting to develop a proposal, the following key activities must be undertaken by the Council:

a. **Research the Funder Thoroughly:** Know the funder's thematic interests (e.g., health, agriculture, innovation), geographic priorities, and evaluation criteria.

b. **Study Past Calls and Funded Projects:** Analyze successful applications through portals like Research Connect, Gateway to Research, or humanitarianweb.org.

c. **Align with SDGs and National Strategies:** Choose at least three relevant UN SDGs and justify alignment using local or regional data.

Tool: Include a funder analysis matrix in proposal planning.

Case Studies for Discussion

Nigeria: The Tertiary Education Trust Fund (TETFund) has successfully supported competitive research proposals by requiring alignment with Nigeria's national development plan. Their insistence on impact-driven proposals has led to increased funding success rates among Nigerian universities.

2. **Assemble a High-Performance Proposal Team:** To begin the development of a grant proposal, a dedicated team, otherwise known as the 'Money Crew', should be constituted. Each member of the money crew should be assigned a defined role, such as proposal lead, data/impact analyst, finance officer, liaison officer, etc. Then, convene a Working Group to brainstorm, assign tasks, and review drafts.

Best Practice: Involve both content experts and experienced grant writers early in the process.

3. **Develop a Strong Case for Support:** A competitive proposal must include a clear, evidence-based narrative that consists of the following:

a. **Defines the Problem:** Use national, sector-specific, and current data to emphasize urgency and relevance.

b. **Articulates Clear Objectives:** craft the broad and specific objectives, ensuring that they are Specific, Measurable, Achievable, Relevant, and Time-bound (SMART).

c. **Outlines Methodology:** Justify the chosen approach and highlight any innovation or scalability.

d. **Identifies Beneficiaries:** Show who benefits from the proposed project and how (individuals, institutions, policies).

Key Tip: **Impact is not just dissemination. Focus on transformation beyond academia.**

4. **Demonstrate Capacity and Collaboration:** Funders want assurance that you have the institutional capacity to manage large-scale grants. Show that you are working with strategic partners using the Quadruple Helix Model: academia, government, industry, and civil society.

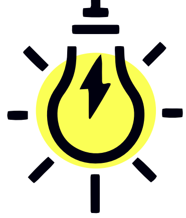
Tip: **Include letters of support or signed MoUs from named partners to strengthen credibility.**

5. **Design with Impact and Sustainability in Mind:** Ensure that your proposal has the following key components:

a. **Include a Theory of Change:** Show how inputs lead to activities, outputs, outcomes, and long-term impact.

b. **Describe Pathways to Impact:** Stakeholder engagement, policy influence, commercialization, or public education.

c. **Highlight Sustainability Plans:** Indicate how the project continues after funding ends (e.g., local budget absorption, private investment, institutional mainstreaming).



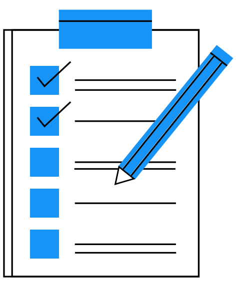
Tip: Set aside resources specifically for impact delivery. These must be visible in the budget.

6. **Build a Realistic, Justified Budget:** Use budget headings such as: Directly Incurred Costs (e.g., personnel, equipment, travel), Directly Allocated Costs (e.g., admin support), and Indirect Costs (e.g., overheads). Justify each item in the "Justification of Resources" section with reference to project objectives.

Note: Budget realism is a frequent criterion for proposal rejection or success.

7. **Mitigate Risks:** Identify at least two major risks to project delivery. Propose concrete mitigation strategies (e.g., legal agreements, staff back-up, local contingencies). Address ethical issues such as data security, participant consent, and conflicts of interest.

8. **Package and Submit Professionally:** Use electronic submission platforms like Je-S (Joint Electronic Submission) for UKRI and UK-based funders, Online Portals of EU, UN, or foundation grant systems. Prepare all required components such as Case for Support, Budget and Justification, CVs of Key Staff, Letters of Support, Data Management, and Impact Plans.



Checklist: Include a pre-submission checklist for quality control.

Below is a sample guide for a competitive grant proposal:

Box 1 : Sample Competitive Proposal for Research Funding

1. Title Page

Project Title: Enhancing Water Security through Community-led Innovation in Northern Ghana
Lead Institution: West African Research and Innovation Council (WAIRIC)
Principal Investigator: Dr. Ama Kwesi
Date: June 1, 2025

2. Executive Summary

This project seeks to address water insecurity in the Upper East Region of Ghana through community-driven innovation. By integrating traditional knowledge with low-cost purification technology, the project aims to reduce waterborne diseases and enhance community resilience. The initiative will pilot affordable water purification kits in 30 villages with plans for scaling. Total budget requested: $480,000.

3. Problem Statement

Over 35% of communities in Northern Ghana lack access to safe drinking water (WaterAid, 2023). Diarrheal diseases are the second leading cause of death among children under five in the region. While government and donor interventions exist, many are not dispersed. This project aims to bridge the gap by testing a scalable community-centred model for water purification and monitoring.

4. Objectives and Research Questions

Objectives:

i. To deploy and test low-cost water purification kits in 30 villages.
ii To train 60 community facilitators on safe water practices.
iii. To assess the health impact of the intervention on community members.

Research Questions:

i. What is the effectiveness of the purification kits in reducing contaminants?
ii. How does training influence community water-use behavior?

5. Methodology and Work Plan

A mixed-method approach will be used. Quantitative data on water quality and health outcomes will be collected pre- and post-intervention. Qualitative interviews will capture community experiences. Data will be analyzed using SPSS and NVivo. Monthly monitoring will ensure fidelity. Ethical approval will be obtained from the University of Ghana Ethics Board.

6. Partnership Strategy

We will build bridges together academia (University of Developmental Studies), local government (Metropolitan, Municipal and District Assemblies), civil society organization (Water for Life NGO). Each partner will contribute expertise, community access, or technical resources via MoUs.

7. Pathways to Impact

Partners will be presented to regional health and water ministries; published in open-access journals and presented at conferences. We will establish a think-tank to continue outreach post-project. The model will be documented as a toolkit for scale-up.

8. Justification of Resources

Personnel ($120,000), Equipment and Kits ($150,000), Travel and Fieldwork ($50,000), Website, Printing, Consumables ($30,000), Monitoring and Evaluation ($15,000), Admin/Overheads ($30,000). Budget is based on WHO/UNICEF standard cost benchmarks and Partners' experience.

9. Risk Assessment and Mitigation

- **High Priority:** Environment delivery. **Mitigation:** Pre-qualify vendors and use local suppliers
- **Risk:** Community resistance. **Mitigation:** Engage chiefs and leaders from inception

10. Monitoring, Evaluation, and Learning (MEL)

A MEL framework will track output indicators (number of kits installed, people trained) and outcome indicators (reduction in contaminated reported illness). A platform service and quarterly learning sessions will be facilitated

11. Sustainability Plan

Community health officers will be trained to continue data collection and system maintenance. A cost-sharing model with BlueWater Ghana will ensure affordable access beyond the project period.

12. Appendices

- CV of Principal Investigator
- Letters of Support from Partners
- Organizational Profile of WAHIC
- Preliminary Data from Baseline Survey

QUIZ TIME

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Which of the following is NOT a key step in developing a competitive proposal?
   a) Understanding the funder's priorities
   b) Including a Theory of Change
   c) Avoiding stakeholder engagement
   d) Building a realistic budget

2. **True/False:** The Quadruple Helix Model includes academia, government, industry, and civil society.

3. **Short Answer:** Name one tool used to analyze funders before proposal submission.

Discussion Question

What are the common weaknesses you have observed in proposals submitted by your council or institution, and how might these be addressed to improve competitiveness for international funding?

Facilitators Notes

a) Emphasize aligning proposals with funder priorities and SDGs.

b) Use real regional examples of successful/failed proposals.

c) Encourage teamwork ("Money Crew") role-play for proposal development.

d) Stress evidence-based problem statements with local data.

Suggestions for Further Reading

a) European Commission (2021). Horizon Europe Programme Guide. Brussels: European Union.

b) National Science Foundation (NSF) (2020). Proposal and Award Policies and Procedures Guide.

Unit 1.2: Strategic Partnerships and Funding Diversification

Session Duration: 2 hours

Format: Group work, worksheets (Quadruple Helix mapping), case study review

Building strong, multidisciplinary partnerships and diversifying funding sources are essential for sustainable research and innovation ecosystems. The ATPS Grantsmanship and Funding Curriculum offers strategic approaches to help institutions achieve these goals. Below is a structured section for building strategic partnerships and funding diversification:

1. **Understanding Strategic Partnerships:** Research has shown that proposals involving multiple helix partners are 60% more likely to receive funding because they demonstrate broader impact potential. A strategic partnership requires collaboration with stakeholders whose missions align with your research objectives. The ATPS curriculum introduces the Quadruple Helix Model, emphasizing four sectors as presented in Figure 1 below:

   a. Government: policy development and governance

   b. Academia: research and teaching

   c. Industry: innovation and commercial value

   d. Civil Society/NGOs: advocacy, service delivery, and societal impact

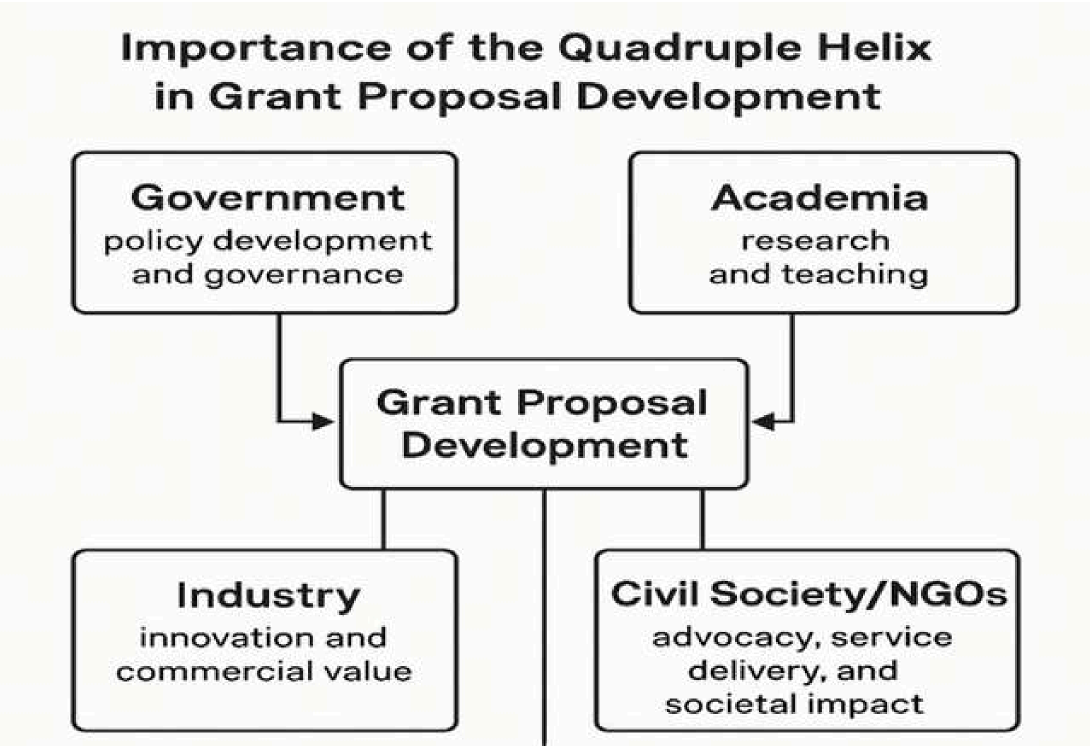


Figure 1: The Quadruple Helix Model

Action Point for Trainees: Map out specific potential partners in each quadrant based on your research theme.

[Trainer distributes large worksheets with the Quadruple Helix template]

2. **Building Effective Partnerships: I**n building effective partnerships, the proposal should:

a. **Identify Shared Goals:** Partners should have overlapping interests in solving a national or regional problem.

b. **Use Data to Drive Collaboration:** Present evidence of the issue and its alignment with national development plans or UN Sustainable Development Goals (SDGs).

c. **Clarify Roles:** Define contributions, responsibilities, and benefits for each partner in terms of knowledge, resources, or influence.

3. **Targeting Regional and International Partners:** Use the Regional Economic Communities (RECs) and international networks as platforms to build cross-border collaborations. Key RECs include:

a. ECOWAS (West Africa)

b. EAC, SADC, COMESA (other African blocs)

c. IGAD, ECCAS, UMA, CEN-SAD (continental partners)

Also consider international funders and agencies, such as:

a. Bill & Melinda Gates Foundation

b. Global Environment Facility

c. European Commission (EuropeAid)

d. FAO, AusAID, DFID, and others.

Tip: Leverage existing Memoranda of Understanding (MoUs) and joint calls for proposals under these platforms.

Case Studies for Discussion

Senegal: The Senegalese National Research Fund partnered with the French Development Agency (AFD) to co-fund projects in renewable energy, showing how local councils can leverage bilateral partnerships.

4. **Diversifying Funding Sources:** Diversification involves seeking funds from a variety of streams, including:

Funding Type	Examples
Bilateral Donors	IDRC, USAID, GIZ, DFID, NORAD
Multilateral Agencies	World Bank, AfDB, UNDP, GEF
Private Foundations	Rockefeller, Ford, Carnegie, Mastercard
Corporate CSR Funds	DuPont, Carrefour, multinational agri-tech or pharma firms
Academic Consortia	Global Challenge Research Fund (UKRI), Horizon Europe
Local Governments	State research innovation grants
Diaspora Networks	Professional and alumni associations with research funding arms

Best Practice: Maintain a centralized database of all potential and previous funders, their themes, application windows, and contacts.

Group Exercise: Each group should form a "MONEY Crew" and role-play outreach to a potential partner. Each crew should be composed of a team of vibrant members, with each member focusing on different aspects of partnership and funding as follows:

a. The Coordinating Person: leads planning and implementation
b. The Source Person: scouts for opportunities and partnerships
c. The Liaison Person: manages communications and engagement
d. The Proposal Person: develops grant proposals
e. The Finance Person: oversees budgeting and compliance

Below is a sample strategic worksheet to be used by each MONEY Crew. Map potential partners in your ecosystem using the Quadruple Helix framework, identifying at least one potential collaborator from academia, industry, government, and civil society. Follow the key steps to develop your Group's strategic partnership using the Worksheet below:

Worksheet: Strategic Partnership & Funding Diversification Mapping

Objective:

To identify and document potential partners and funding sources aligned with your research or innovation project, using the Quadruple Helix and funding typology approaches.

Section 1: Define Your Focus Area

What problem are you solving? (Summarize in one sentence)
Which SDGs does it align with? (Tick all that apply):

☐ No Poverty
☐ Quality Education
☐ Climate Action
☐ Gender Equality
☐ Clean Water
☐ Affordable Energy
☐ Industry, Innovation and Infrastructure
☐ Others: ______________________________

Section 2: Strategic Partnership Mapping (Quadruple Helix)

Sector	Potential Partner(s)	Contact Person/Unit	Role or Value to Project
Academia			
Government			
Industry			
Civil Society/NGO			

💡 **Tip:** Consider local universities, ministries, private sector innovators, NGOs, and advocacy groups.

Section 3: Funding Source Identification

Type of Funders	Name of Fund	Focus Area	Application Window

5. **Building a Strategic Partnerships Plan (30 minutes):** Case Study: Kenya's National Research Fund transformed its success rate by implementing a partnerships strategy with three components: 1) An annual 'Research Matchmaking' event bringing together all four helix partners, 2) A database of potential collaborators categorized by expertise, and 3) Partnership training for researchers.

Group Activity: In your groups, draft a one-page partnerships strategy for your organization, including:

a. Top three strategic partner types to cultivate
b. Methods for partnership development
c. Criteria for evaluating potential partners
d. Mechanisms for sustaining partnerships beyond single projects

6. **Promoting Your Work to Attract Partners and Funders:** Use professional social media such as LinkedIn to promote your projects, tag partners, and highlight milestones. Also, ensure impact promotion by regularly publishing your research outputs, success stories, and community benefits. Use forums, such as attendance at and organization of workshops, to build trust and co-develop proposals with new stakeholders.

7. **Institutionalizing Partnership and Fundraising Strategies:** Develop a Partnership Engagement Policy that outlines criteria, processes, and expected outcomes for collaboration. Create a funding strategy document that identifies annual priorities, targets, and pipelines. Establish a grants office or a resource mobilization unit within the council to ensure long-term sustainability.

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Which of the following is NOT part of the Quadruple Helix Model?

   a) Industry

   b) Academia

   c) Private Citizens Only

   d) Civil Society

2. **True/False:** Diversifying funding sources can include private foundations, bilateral donors, and diaspora networks.

3. **Short Answer:** Give one advantage of mapping partners before approaching them.

Discussion Question

Using the Quadruple Helix model, which local partners (academia, government, industry, civil society) do you think your council under-engages with, and what strategies could change this?

Facilitators Notes

a) Demonstrate the Quadruple Helix Model using a mapping exercise.

b) Facilitate partner identification brainstorming in groups.

c) Showcase regional case studies (e.g., Senegal-AFD renewable energy).

d) Highlight diversification beyond traditional donors.

Suggestions for Further Reading

a) Carayannis, E., & Campbell, D. (2012). Mode 3 Knowledge Production in Quadruple Helix Innovation Systems. Springer.

b) OECD (2019). Mobilising Funding for Development Research. Paris: OECD Publishing.

c) Global Research Council (2021). Annual Report on Multilateral Collaboration in Research.

Unit 1.3: Managing and Disbursing Grants Effectively

Session Duration: 1.5 hours

Format: Lecture, practical budgeting exercise, peer discussion

Effective management and disbursement of grants are crucial for ensuring accountability, impact, and sustainability in funded projects. To manage and disburse grants effectively, especially in the context of research and innovation funding councils in West Africa, the ATPS Grantsmanship and Funding Manual provides several best practices and strategic insights under key steps as follows:

1. **Establish a Strong Governance and Management Structure:** To achieve this, clearly designate the coordinating, finance, liaison, and proposal officers, commonly referred to as the "MONEY Crew." Each role should have defined duties for planning, budgeting, reporting, and communication. Then, build multidisciplinary teams that encourage collaboration across academia, industry, government, and civil society to ensure inclusive and impactful research.

2. **Pre-Disbursement Checks:** Before releasing funds, verify eligibility by ensuring that the project aligns with the funder's mission (e.g., UN SDGs, local priorities). Evaluate the grantee's administrative and technical ability to manage the funds, and require a work plan with clear deliverables, timelines, and milestones.

3. **Budget Justification and Approval:** Include Indirect incurred costs such as project-specific staff, equipment, travel, and consumables, directly allocated costs which cover shared services like administrative support and research infrastructure, and allow indirect costs which cover institutional overheads (e.g., utilities, HR, legal). Use a justification of resources document to ensure every budget item is clearly explained.

4. **Transparent Disbursement Mechanisms:** Use phased payment to disburse funds in tranches linked to the achievement of agreed milestones. Monitor Financial Reporting by requiring quarterly or bi-annual financial reports, including receipts, ledgers, and bank statements. Ensure audit readiness by maintaining proper documentation for all projects to facilitate potential audits.

5. **Monitoring and Evaluation (M&E):** Track progress using work packages and timelines to measure progress against set goals. Impact Reporting: Go beyond dissemination and require grantees to show tangible societal, economic, or policy-level impacts. Mitigate risks by identifying at least two major risks per project and propose mitigation strategies.

6. **Capacity Building and Learning:** Encourage peer review and feedback by supporting learning through regular knowledge-sharing workshops, peer reviews, and community engagement. Invest in grant administration training by providing regular training sessions for grantees on financial reporting and compliance.

7. **Digital and Electronic Tools:** Utilize online systems to implement grant management platforms (e.g., Je-S) for electronic submission, tracking, and communication. Promote transparency by utilizing dashboards and open-data platforms to publish fund status, disbursement logs, and evaluation results.

8. **Post-Grant Review and Legacy:** Require comprehensive technical and financial reports at the end of the project, capture lessons learned by documenting both successes and failures to inform future improvements.

9. **Plan for Sustainability:** Support follow-up funding or integration into institutional budgets.

Summary Checklist for Effective Grant Management

Element	Best Practice
Roles & Structure	Define and document team responsibilities.
Financial Planning	Clear, justified, and auditable budget.
Disbursement	Link to milestones and phased payments.
Monitoring & Reporting	Regular narrative and financial reports.
Impact Assessment	Focus on outcomes beyond academic output.
Risk Management	Identify and mitigate risks proactively.
Technology Use	Apply digital tools for transparency and efficiency.
Sustainability	Ensure outcomes live beyond the funding cycle.

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Which is an example of an indirect cost?

   a) Project-specific equipment

   b) Salaries for project staff

   c) Utilities for the institution

   d) Travel for fieldwork

2. **True/False:** Disbursing funds in phases can help improve accountability.

3. **Short Answer:** Name one pre-disbursement check that should be done before releasing grant funds.

Discussion Question

How can councils balance strict financial accountability with flexibility for researchers working in unpredictable field conditions?

Facilitators Notes

a) Walk through phased disbursement and milestone-linked payments.

b) Use a sample budget exercise to demonstrate direct vs. indirect costs.

c) Stress accountability and transparency through documentation.

d) Encourage peer sharing of common grant management challenges.

Suggestions for Further Reading

a) USAID (2019). Grant Management Guidelines. Washington, DC.

b) Hladchenko, M. (2016). “Governance of Research Funding Systems in Europe.” Higher Education Policy, 29(2).

c) World Bank (2017). Financial Management in Research and Development Projects.

Unit 1.4: Strengthening Monitoring, Evaluation, and Learning (MEL) Mechanisms

Session Duration: 2 hours

Format: MEL matrix workshop, small group tasks, reflection session

To support West African Research and Innovation Funding Councils in strengthening monitoring, evaluation, and learning (MEL) systems, the ATPS Grantsmanship and Funding module emphasizes an integrated, impact-focused approach. Below is a structured section that can guide Councils in building effective MEL systems. MEL ensures that projects are on track, achieving results, and generating actionable insights for future improvements. MEL is not just about accountability. It is central to improving impact and driving long-term value from research and innovation investments.

1. **Define MEL Early in the Project Lifecycle:** MEL planning must start during proposal development, not after funding approval. The proposal should include a dedicated MEL framework, budget, and clear indicators.

Action Tip: Include MEL experts in the proposal design team to ensure integration of tools and metrics.

2. **Use a Theory of Change (ToC) as the Foundation:** A Theory of Change maps out how inputs and activities lead to outputs, outcomes, and long-term impacts. Below is an example of the components of a ToC.

Component	Example from a Water Research Project
Inputs	Training materials, kits, facilitators
Activities	Community training, kit distribution
Outputs	60 facilitators trained, 30 villages served
Outcomes	Reduced waterborne illness, improved hygiene
Impact	Healthier communities, lower under-5 mortality

Insight: MEL should measure not only what is done (outputs), but also what changes (outcomes and impact) because of the intervention.

3. **Establish SMART Indicators:** Use SMART indicators (Specific, Measurable, Achievable, Relevant, Time-bound) for all levels of results. See below:

Level	Indicator Example
Output	Number of community trainings completed
Outcome	% reduction in waterborne diseases among children
Impact	Policy adoption of community-led water purification models

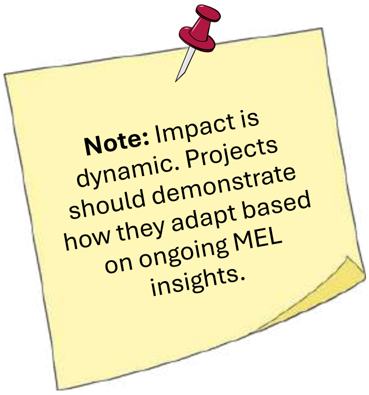
Group Activity: Each group should draft three indicators for a real or mock project.

4. **Develop a MEL Framework or Matrix:** A MEL matrix clearly defines the indicators, data sources, responsible persons, and frequency of measurement. See an example of a MEL Matrix below:

Objective	Indicator	Data Source	Frequency	Responsible
Improve access to clean water	% households using clean water	Household survey	Quarterly	M&E Officer

Tool: Encourage Councils to standardize the use of MEL matrices across all funded projects.

5. **Incorporate Adaptive Learning and Reflection:** Learning is central to the MEL cycle. First, conduct mid-term reviews and after-action reviews (AARs). Second, organize learning workshops with grantees and stakeholders to discuss what worked and what didn't. Third, encourage the documentation of lessons learned in quarterly learning briefs.



6. **Link MEL to Decision-Making and Policy:** Use MEL outputs to guide grant renewals or extensions; Strategic investment decisions; national or regional policy engagement; and share findings through policy briefs, media, and conferences.

Impact goes beyond academia. MEL results should influence real-world systems and policy outcomes.

7. **Budget and Resource MEL Properly:** The ATPS manual stresses that MEL costs must be included in the proposal budget, such as allocating 5–10% of the total grant for MEL activities, funding external evaluations for objectivity, and supporting capacity-building of grantee MEL teams.

Below is a sample MEL Framework:

Monitoring, Evaluation, and Learning (MEL) Framework Template

This MEL framework template supports the design and implementation of effective monitoring, evaluation, and learning activities. It is designed for research and innovation projects managed or supported by Research and Innovation Funding Councils in West Africa.

I. MEL Matrix

Objective/Outcome	Indicator (SMART)	Data Source/Method	Frequency	Responsible Person/Unit

II. Theory of Change (ToC)

Describe the logic of your project using this format:

Inputs → Activities → Outputs → Outcomes → Impact

III. Evaluation Plan

1. Baseline Assessment: ________________________________

2. Mid-term Evaluation: ________________________________

3. Final Evaluation: ________________________________

4. Key Evaluation Questions:

- What changed and for whom?
- What worked and why?
- What are the lessons for future projects?

IV. Learning and Adaptation

Describe how findings from MEL will be used to improve project performance and inform future programming.

V. MEL Budget Summary

Include a dedicated MEL budget in the main proposal. Suggested items include:

- External Evaluator fees
- Data collection costs
- Analysis and reporting tools
- Learning workshop facilitation

In summary, Monitoring, Evaluation, and Learning should not be a compliance exercise. For funding Councils, MEL must become a strategic learning engine, driving improved project design, delivery, accountability, and long-term sustainability.

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Which of the following is NOT part of a MEL framework?
   a) Indicators
   b) Data sources
   c) Frequency of measurement
   d) Personal opinions of the researcher
2. **True/False: MEL planning should begin after the project has been implemented.**
3. **Short Answer:** Give one reason why a Theory of Change is useful.

Discussion Question

How can MEL findings be better integrated into national policy or council strategy, rather than remaining as compliance reports?

As a wrap-up, take 10 minutes to write down three specific actions you will take in the next 30 days to implement strategic grantsmanship principles at your organization.

{After individual writing time}

Sharing: Participants share their key action items.

Having mastered the principles of securing and managing research funding, it becomes clear that financial sustainability often depends on more than competitive proposals alone. Strategic collaborations with the right partners can multiply the reach and impact of funded projects. Module 2 builds on this foundation by introducing Public-Private Partnerships (PPPs) as a structured mechanism to leverage resources, share risks, and enhance the delivery of innovation. The relationship-building skills developed in Module 1 are essential here, as they form the bedrock for identifying, negotiating, and sustaining partnerships that deliver long-term value.

Facilitators Notes

a) Begin with a simple Theory of Change exercise.

b) Use MEL matrix templates in small groups.

c) Stress adaptive learning — encourage mid-course correction.

d) Highlight MEL as a decision-making tool, not just compliance.

Suggestions for Further Reading

a) OECD-DAC (2019). Principles of Evaluation of Development Assistance.

b) Patton, M. (2011). Developmental Evaluation: Applying Complexity Concepts to Enhance Innovation and Use.

MODULE TWO:
PUBLIC-PRIVATE PARTNERSHIPS (PPPS)

Research and innovation are vital drivers of national socio-economic development in West Africa. However, persistent funding gaps, institutional fragmentation, and limited cross-sector collaboration continue to constrain the region's innovation potential. Public-Private Partnerships (PPPs) offer a strategic opportunity for research and innovation funding agencies to mobilize resources, enhance impact, and promote inclusive development by leveraging the complementary strengths of the public sector, private enterprises, and civil society. Despite growing interest in PPPs, West African research and innovation funding agencies face challenges in designing, negotiating, and sustaining effective partnerships. Issues such as misaligned objectives, weak institutional frameworks, and a lack of partnering skills often undermine the success of collaborative initiatives in the region. This training module responds to these challenges by providing a practical guide tailored to the needs of research and innovation funding agencies in West Africa. It equips participants with the knowledge, tools, and strategies needed to build and manage partnerships that are equitable, transparent, and results-oriented. Through this training, research and innovation funding agencies will be better positioned to catalyze innovation ecosystems and drive meaningful, long-term impact across the region.

Module Overview

Category	Summary
Objectives	Understand PPP principles, benefits, and risks. Design and structure effective PPP agreements. Manage and sustain partnerships for long-term impact. Apply MEL in PPP contexts.
Duration	Approx. 6 hours total (4 units @ 1–2 hours each)
Key Topics	- Fundamentals of PPPs.- PPP design and structuring.- Partnership governance and resource mapping.- Adaptive management and sustainability strategies.- MEL frameworks for PPPs.
Target Participants	Council executives, partnership and legal officers, program managers, and MEL staff.
Expected Outcomes	- Participants design PPPs with clear roles, governance, and sustainability plans.- Enhanced cross-sector collaboration for innovation.- MEL applied to monitor and adapt partnerships.- Increased resource mobilization through PPPs.

Training Objectives: By the end of this training, participants will be able to:

1.	Understand the fundamentals of Public-Private Partnerships (PPPs).
2.	Design and structure a PPP.
3.	Manage and Sustain PPPs.
4.	Apply Monitoring, Evaluation, and Learning (MEL) Frameworks in PPPs.

Training Outcomes: The expected training Outcomes of this Module Include:

1.	Participants understand and articulate the principles, roles, and benefits of PPPs in research and innovation funding.
2.	Participants can design and structure PPPs with clearly defined objectives, stakeholder roles, governance systems, and legal agreements.
3.	Councils can manage PPPs using adaptive tools, conflict resolution mechanisms, and performance monitoring for long-term sustainability.
4.	Participants can apply MEL tools in real-time to track progress, facilitate learning, and improve partnership effectiveness.

Facilitation Methods and Procedures

1. Session Flow

a. Opening (5 mins): Highlight the role of PPPs in bridging resource gaps.

b. Presentation (30 mins): Explain fundamentals of PPPs, designing and structuring partnerships, managing and sustaining them.

c. Interactive Discussion (20 mins): Identify possible PPPs in participants' sectors.

d. Case Study (25 mins): Review a successful PPP in West Africa.

e. Group Work (30 mins): Develop a draft PPP concept for a hypothetical project.

f. Conclusion (10 mins): Share group outputs and facilitator's final insights.

2. Key Discussion Points

a. Benefits and risks of PPPs.

b. Legal and governance considerations.

c. Negotiation and contract management.

d. Sustainability and trust-building.

3. Activities & Exercises

a. **PPP Design Challenge:** Teams design a PPP outline.

b. **Risk Mapping:** Identify risks and propose mitigation measures.

4. Facilitation Tips

a. Bring in examples from multiple sectors (agriculture, health, technology).

b. Encourage role-play during negotiation segments.

5. Potential Challenges & Solutions

a. **Challenge: Participants may struggle to identify private partners.**

b. **Solution: Share directories or case examples of potential partners.**

Training Content

Below are the study units under this module:

Unit 2.1: Understand the Fundamentals of Public-Private Partnerships (PPPs)

Unit 2.2: Designing and structuring of a PPP

Unit 2.3: Managing and Sustaining PPPs

Unit 2.4: Monitoring, Evaluation and Learning (MEL) in PPPs

Unit 2.1: Understand the Fundamentals of Public-Private Partnerships (PPPs)

Session Duration: 2 hours

Format: Interactive lecture, role-play, group simulation

1.1 Introduction to PPPs (15 minutes)

In the context of West Africa, where public funding for research is often constrained, PPPs present an opportunity to tap into private capital, technical expertise, and operational efficiency. They also offer a platform for aligning innovation efforts with national and regional development agendas. While traditional funding relies solely on government or donor budgets, which are often limited. PPPs leverage private sector capital and expertise, enabling larger-scale and sustainable projects. Many African countries face budget constraints. PPPs attract private investment, reducing reliance on scarce public funds.

1.2 Definition and Core Concepts

a. **Public Sector:** Government institutions that provide policy frameworks, regulations, and public funding. They ensure projects align with national development goals. Includes ministries and agencies responsible for regulation, policies, and funding. Councils belong here and should lead the charge in convening actors.

b. **Private Sector:** Businesses and industries that bring investment, innovation, and efficiency. They focus on profitability but can contribute to social impact. Focused on innovation, investment, and speed. Councils need to learn how to align funding models with market-driven incentives.

c. **Partnership:** A collaborative arrangement where risks, resources, and rewards are shared. It combines public oversight with private sector efficiency. True PPPs are about co-creation, not outsourcing. Successful ones share resources, responsibilities, and risks.

Sector Roles and Contributions (20 minutes)

This segment explores the distinctive roles and contributions of the three major sectors involved in PPPs. The public sector plays a central role in creating an enabling environment for partnerships. It ensures legitimacy, enforces regulations, and provides essential services and infrastructure. It also establishes policies and standards that guide the direction and ethics of research and innovation.

The private sector, driven by profit and market opportunity, brings in investment, entrepreneurial skills, and innovative capabilities. It is often more agile and result-oriented, which can help accelerate the implementation of research findings and innovations into market-ready solutions. Civil society contributes by representing community interests, advocating for inclusive development, and ensuring accountability. Its focus on social values and equity makes it a critical player in safeguarding the public interest within PPPs.

Case Studies for Discussion

a. **Ghana:** The Council for Scientific and Industrial Research (CSIR) partnered with Guinness Ghana Breweries Ltd. to research and promote local sorghum production. This reduced import dependency and created a sustainable supply chain for local farmers.

b. **Nigeria:** The National Agency for Food and Drug Administration and Control (NAFDAC) partnered with Dangote Foundation to improve food fortification programs, demonstrating a health-focused PPP model.

Group Activity: Each group will role-play the different partnership sectors and discuss how their sector contributes to partnerships in research and innovation, with a particular focus on the West African context. After group discussions, representatives will present their findings to the plenary, highlighting potential synergies and tensions between sectors.

Why Partner? Strategic Benefits of PPPs (15 minutes)

By bringing together diverse partners, PPPs enable the pooling of resources: financial, technical, and human that none of the sectors could easily mobilize on their own. This integration facilitates innovative and scalable solutions to development challenges. PPPs also enhance responsiveness and adaptability. When sectors collaborate, they can co-create solutions that are not only technically sound but also socially acceptable and policy-aligned. The combined credibility and capacity of the partnership increase the chances of long-term impact and public acceptance. In the West African context, partnerships are particularly valuable in bridging institutional and financial gaps. For example, PPPs can support joint funding of research projects, co-establishment of innovation hubs, or collaborative capacity-building programs across institutions and borders.

Individual task: Each participant is to reflect on how partnerships might help their agencies expand their reach, enhance program effectiveness, or achieve greater sustainability. They will be invited to share their thoughts with the group to enrich the discussion.

Principles and Characteristics of Effective Partnerships (20 minutes)

An effective partnership is grounded in principles that promote trust and cooperation among diverse actors. The following are the key principles of an effective PPP.

Equity: Equity ensures all partners, regardless of size or financial clout, have a fair voice in decision-making and are valued for their unique contributions. In West African PPPs, equity might mean involving grassroots NGOs in governance or recognizing the value of traditional knowledge from community-based groups. Councils are encouraged to transition from hierarchical to horizontal structures, where influence is based on contribution and relevance, rather than just budget share.

Transparency: Transparency builds trust through open communication, shared documentation, and co-created decisions. In the context of PPPs, this includes shared access to budgets, project updates, evaluation results, and any challenges that may arise. Councils will be trained to utilize transparency protocols, including joint dashboards, multi-stakeholder steering committees, and regular feedback sessions.

Mutual benefit for all partners: Sustainable partnerships are those where each party sees tangible value, academic institutions gain real-world validation, companies access innovation pipelines, governments see social impact, and civil society ensures inclusivity.

Beyond principles, successful partnerships are supported by specific organizational traits. These include a clearly defined vision for partnering, strategic alignment with institutional goals, leadership commitment, and availability of resources such as dedicated personnel and budget lines. Effective systems and processes, including clear partner selection criteria, due diligence protocols, legal frameworks, and monitoring systems, also play a crucial role in ensuring success.

Group Simulation: "Partnership Theater"

Each group is given a role in a fictional research PPP (e.g., agritech startup, national council, rural cooperative). Act out partnership negotiations focusing on integrating the 3 principles. Debrief on power imbalances, value misalignment, and communication challenges.

Strategic Elements of a PPP: The key elements of PPP include the following:

a. **Stakeholder Mapping:** Identifying actors with shared goals, influence, and resources.
b. **Legal Frameworks:** Contracts, MoUs, governance charters.
c. **Resource Contributions:** Cash, infrastructure, IP, personnel.
d. **Management Mechanisms:** Joint steering committees, shared reporting, dispute resolution.

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Which principle ensures all partners have a fair voice in decision-making?
   a) Transparency
   b) Equity
   c) Profitability
   d) Exclusivity
2. **True/False:** PPPs can only involve government and private sector actors.
3. **Short Answer:** Give one benefit of forming a PPP.

Discussion Question

In your context, what are the biggest barriers to building trust between government and private sector actors in PPPs, and how might they be overcome?

Facilitators Notes

a) Use role-play (government, private sector, civil society) to show different perspectives.

b) Emphasize equity, transparency, and mutual benefit principles.

c) Share African PPP success stories (e.g., CSIR–Guinness Ghana).

Suggestions for Further Reading

a) World Bank (2020). Public-Private Partnerships Reference Guide (Version 3.0).

b) Grimsey, D., & Lewis, M. (2004). Public Private Partnerships: The Worldwide Revolution in Infrastructure Provision and Project Finance.

Unit 2.2: Designing and structuring a PPP

Session Duration: 1.5 hours

Format: Lecture, case illustration, PPP design exercise using templates

Designing and structuring a Public-Private Partnership (PPP) refers to the intentional process of planning, organizing, and formalizing how a partnership between a public entity (like a research funding council) and one or more private or civil society partners will function. It ensures that the collaboration is goal-driven, transparent, and effective, and that all partners have clearly defined roles, responsibilities, and benefits.

Before entering a partnership, it is crucial to define: What problem the PPP is trying to solve, why a partnership is needed, instead of a purely government or private-led effort, what specific outcomes or impact is expected (e.g., creating a digital platform for innovation hubs, co-funding a research challenge, commercializing R&D outputs). This ensures the partnership has a shared vision and common goals.

Designing and structuring a PPP involves creating the architecture that will guide how a public institution, such as a research and innovation funding council, collaborates with private companies, civil society organizations, or academic institutions. This structure ensures the partnership is not only effective but also accountable, equitable, and sustainable. Below are the core components involved in designing and structuring a successful PPP:

a. **Defining the Purpose and Scope of the Partnership:** The first step in designing a PPP is to define its purpose clearly. This involves answering key questions: What problem or opportunity is the partnership addressing? Why is a partnership the best approach to solve this problem? What is the expected outcome? In the context of research and innovation councils, the purpose of a PPP could be to develop and commercialize a new agricultural technology, establish a joint innovation lab, or co-finance community-based research. This definition must align with the council's mandate, national development plans, or sector-specific goals. The scope then defines the geographical coverage, target beneficiaries, expected timelines, and boundaries of the project. Without clarity on purpose and scope, PPPs risk becoming vague, unfocused collaborations that yield little impact.

b. **Identifying Stakeholders and Clarifying Roles:** After the purpose is defined, the next step is to identify the key actors who should be involved in the partnership and to clarify their roles. Stakeholders typically include representatives from the public sector (e.g., research councils or ministries), the private sector (e.g., firms, investors), academia (e.g., universities, think tanks), and civil society (e.g., NGOs, cooperatives, community leaders). Each stakeholder brings specific assets, such as financial capital, technical expertise, access to communities, or policy influence. Proper stakeholder mapping helps distinguish between core partners (those involved in direct implementation), supporting actors (those who provide resources or advocacy), and beneficiaries (those who will be affected by the project). It is equally important to define the roles and expectations of each actor early on. This eliminates confusion, avoids duplication of efforts, and builds accountability.

c **Mapping Resources and Partner Contributions:** An effective PPP is based on the recognition that all partners contribute something of value, whether monetary or non-monetary. Designing the partnership requires mapping these contributions to understand who brings what to the table. This could include funding, equipment, land, human resources, data, logistics, or intellectual property. For example, a funding council may offer grant funding and policy backing, while a private company provides technical equipment and co-financing. An academic institution may contribute laboratories and researchers, while an NGO may contribute access to communities or local implementation expertise. Documenting these contributions not only helps with project planning but also sets the foundation for equitable recognition and benefit sharing.

d **Establishing Governance and Decision-Making Structures:** Governance is the backbone of any structured PPP. It outlines how decisions are made, who holds authority, and how conflicts are resolved. A sound governance structure prevents dominance by any one partner and ensures inclusive participation. Typically, this includes forming joint steering committees or management boards with representatives from each sector. It may also include technical working groups for specific tasks (e.g., research coordination, monitoring and evaluation). These structures should define roles such as chairperson, secretariat, financial controller, and partnership liaison. Clear terms of reference must be developed for each body to guide their function. Good governance promotes transparency, builds trust, and enables effective project implementation.

e **Drafting Legal and Contractual Agreements:** Once roles and governance are agreed upon, the partnership must be formalized through written agreements. These may include Memoranda of Understanding (MoUs), contracts, or joint venture agreements. These documents serve to codify the terms of engagement and protect all parties. Key components of these legal documents include: the partnership's objectives, roles and responsibilities of each party, financial arrangements, timelines, intellectual property rights, data sharing protocols, and procedures for conflict resolution or withdrawal. In West African contexts, where legal frameworks may vary by country, it is essential that these documents comply with local laws and are reviewed by legal experts. Legal agreements provide clarity, mitigate risks, and support enforcement of commitments.

f **Designing Performance Metrics and Monitoring Systems:** To ensure that the partnership stays on track, a structured system of monitoring and evaluation must be built into the design phase. This includes identifying key performance indicators (KPIs), defining how progress will be tracked, and assigning responsibility for reporting. For example, performance metrics might include the number of innovations developed, number of beneficiaries reached, funds leveraged, or patents filed. A joint monitoring and evaluation (M&E) framework allows partners to assess progress collectively, identify areas for improvement, and celebrate successes. It also ensures that accountability is not one-sided but shared by all.

g **Developing a Sustainability and Exit Strategy:** Finally, any well-structured PPP must consider how the partnership will be sustained or exited once the primary objectives are achieved. This includes identifying who will own and operate any infrastructure developed, how operational costs will be covered going forward, and what happens to intellectual property or revenues generated. In some cases, PPPs may evolve into permanent institutions, while in others, the public sector may absorb ongoing functions into its structure. An exit strategy outlines the conditions under which a partner may leave the arrangement, how responsibilities will be transferred, and how the impact of the project will be maintained. This avoids abrupt termination of initiatives and ensures long-term value beyond the project lifecycle.

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Which document is used to outline the legal terms of a PPP?
   a) MoU
   b) Minutes of Meeting
   c) Theory of Change
   d) Work Plan
2. **True/False:** Stakeholder mapping helps clarify partner roles.
3. **Short Answer:** Name one factor to consider when defining the purpose of a PPP.

Discussion Question

What key considerations should be included in a PPP agreement to ensure that both public good and private profit motives are balanced?

Facilitators Notes

a)Guide participants through stakeholder mapping.

b)Stress the importance of governance and clear legal agreements.

c)Use case-based exercises to illustrate risk-sharing.

Suggestions for Further Reading

a) OECD (2014). Principles for Public Governance of Public-Private Partnerships.

b) Yescombe, E. R. (2013). Public-Private Partnerships: Principles of Policy and Finance.

Unit 2.3: Managing and Sustaining PPPs

Session Duration: 1.5 hours

Format: Group Simulation, Real-Time Crisis Cards, Peer Review

Once a Public-Private Partnership (PPP) has been successfully designed and launched, the next critical phase is managing and sustaining it over time. This phase extends beyond initial implementation and focuses on how the partnership operates on a day-to-day basis, how challenges are addressed collaboratively, and how the value created is preserved and scaled. Managing a PPP involves ensuring that all partners remain actively engaged, that commitments are honored, and that agreed-upon results are tracked and achieved. It also requires maintaining trust, resolving emerging tensions, and adapting to changes in the operational or political environment. Sustaining a PPP means planning for its long-term viability, whether that involves institutionalizing it within public structures, spinning it off as a private initiative, or embedding its outcomes into national policies or markets. Many PPPs fail not because of poor design, but due to weak coordination, lack of communication, misaligned expectations, or absence of a sustainability strategy.

a. **Partnership Lifecycle Planning:** PPPs evolve through phases: initiation, implementation, maturity, and exit. Each phase requires different management tactics. For instance, implementation needs joint monitoring, while exit requires sustainability planning. Participants will build a PPP lifecycle tracker tool tailored to their councils' specific needs.

b. **Conflict Management Mechanisms:** Conflicts are inevitable. This session prepares participants to design grievance redress systems, escalation protocols, and joint review processes. Real-life case examples show how unmanaged disputes can derail otherwise successful collaborations.

c. **Adaptive Partnership Management:** Participants are introduced to the concept of adaptive management, which involves using real-time data and feedback to adjust project design, timelines, or responsibilities. The training includes tools like learning loops, quarterly partnership health checks, and adaptive dashboards.

d. **Sustaining and Scaling Impact:** To prevent PPPs from collapsing after initial funding, councils must build exit strategies, institutional buy-in, and potential for scale. This section covers how to integrate partnerships into national R&I policies, use results to attract future funding, and promote institutional anchoring.

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Which of the following is NOT part of sustaining a PPP?
   a) Building trust
   b) Adaptive management
   c) Ignoring conflicts
   d) Integrating results into national policies
2. **True/False:** Conflict management is essential to long-term PPP success.
3. **Short Answer:** Give one method for scaling PPP impact.

Discussion Question

What strategies could prevent power imbalances between large multinational partners and smaller local institutions in PPPs?

Facilitators Notes

a) Introduce conflict resolution tools.

b) Run a “Crisis Simulation” activity to test adaptive management.

c) Emphasize sustainability beyond donor cycles.

Suggestions for Further Reading

a) Hodge, G., Greve, C., & Boardman, A. (2018). Public-Private Partnerships: The Next Generation. Routledge.

b) IFC (2017). PPP Success Stories in Emerging Markets.

Unit 2.4: Monitoring, Evaluation and Learning (MEL) in PPPs

Session Duration: 1 hour

Format: Lecture, MEL matrix design, group presentation

MEL is a critical component of any well-structured PPP. It ensures that partnerships are not just active, but effective, accountable, and adaptive. In the context of research and innovation PPPs, MEL goes beyond simply tracking outputs; it provides the evidence base for assessing whether the partnership is delivering value for all partners, achieving its goals, and generating lessons for future collaborations. Below is a detailed discussion of each of the essential elements that make up a strong MEL framework for PPPs:

a. **MEL Framework for PPPs:** A comprehensive MEL framework provides the overall structure for how progress will be tracked, performance assessed, and learning integrated throughout the lifecycle of the partnership. In the context of PPPs, the MEL framework must be co-created and jointly owned by all partners to reflect their diverse interests and expectations. This means agreeing on what success looks like from multiple perspectives: policy impact for government, return on investment for private partners, research outcomes for academia, and community benefits for civil society. The framework should outline clear objectives, indicators, data collection methods, responsibilities, timelines, and feedback mechanisms. Importantly, it must link back to the partnership's initial goals and theory of change, helping partners remain focused and aligned as the project unfolds. Without a well-defined MEL framework, there is a risk that efforts will become fragmented, achievements will go unrecognized, and valuable insights will be lost.

b. **Data Collection and Analysis:** For a MEL framework to function effectively, the right data must be collected and analyzed systematically. This involves selecting methods that suit the nature of the project and the capacities of the partners. For PPPs in West Africa, where resources and infrastructure may be limited, it's important to blend both qualitative and quantitative methods. Quantitative data might include metrics such as the number of technologies transferred or investment generated, while qualitative methods such as interviews, focus groups, or participatory storytelling can capture community experiences, partner dynamics, or unintended outcomes. Partners must agree on who is responsible for collecting which data, how often, and using what tools. For example, an NGO may collect community feedback, while a private partner tracks financial indicators. Tools like mobile surveys (e.g., KoboToolbox) and digital dashboards can facilitate efficient data collection, especially in multi-site projects. Data should be disaggregated where possible (by gender, location, sector, etc.) to support inclusive analysis. Ultimately, this data provides the foundation for evidence-based decision-making and course correction.

c **Feedback Loops and Learning Briefs:** One of the most powerful but often neglected aspects of MEL is the creation of intentional feedback loops. Feedback loops are the mechanisms by which insights from monitoring and evaluation are fed back into decision-making processes in real time. In a PPP, this could involve monthly performance reviews, quarterly learning workshops, or partner reflection meetings. Learning briefs are concise, focused documents that synthesize key findings, successes, and challenges during a specific period. These briefs help partners take stock of what is working, what is not, and why. They can also serve as tools for sharing lessons across sectors, institutions, or even with other countries undertaking similar partnerships. Establishing these feedback practices helps make learning visible and actionable. More importantly, it builds a culture of continuous improvement where partners are not afraid to adjust strategies, innovate new approaches, or acknowledge failure as a step toward success.

d **Shared Performance Indicators:** Performance indicators in PPPs must reflect both individual accountability and shared responsibility. This means that while each partner may track their own deliverables, there must also be joint indicators that measure the success of the partnership as a whole. These might include the number of innovations successfully piloted, the percentage of budget executed on time, the extent of private investment leveraged, or the policy influence of research results. Jointly developed indicators foster collective ownership and reduce the tendency for "siloed" evaluation, where each partner measures only their achievements. The development of these indicators should consider the different reporting needs of each sector involved (e.g., government funders may want socio-economic indicators, while private companies may want performance returns). Furthermore, the indicators must be SMART. Specific, Measurable, Achievable, Relevant, and Time-Bound ,to provide useful information for both day-to-day management and long-term evaluation.

e **Adaptive Management and Real-Time Decision-Making:** The dynamic nature of PPPs, often involving diverse actors, multiple geographies, and complex goals, requires that partners be able to adapt their approaches as conditions change. MEL enables adaptive management by providing real-time data and analysis that can trigger timely decisions. For instance, if data shows that community uptake of an innovation is lower than expected, the partnership may decide to adjust its outreach strategy or involve additional civil society groups. Similarly, if budget execution is behind schedule, financial reporting tools can help identify bottlenecks and reallocate resources. Adaptive management also means being willing to revisit and revise initial assumptions. MEL provides the evidence base to justify changes and facilitates open discussions among partners, making the partnership more resilient and responsive to evolving realities.

f **Knowledge Sharing and Communication of Results:** Effective MEL in PPPs should result in the production and dissemination of knowledge products that showcase achievements and inform broader audiences. These include technical reports, policy briefs, case studies, infographics, and presentations. The knowledge generated through PPPs, especially in research and innovation contexts, has value far beyond the immediate project team. Partners should agree on how findings will be communicated, who the target audiences are, and which platforms will be used. This could involve presenting at national science and technology forums, publishing in open-access journals, or engaging local media to highlight community impact. Communication of results not only ensures transparency and accountability but also strengthens the visibility of the partnership and helps to attract future collaborators and funders.

MEL for PPPs:

In a Public-Private Partnership, aligning Key Performance Indicators (KPIs) with shared objectives is essential for tracking progress and demonstrating impact. KPIs ensure that all partners remain focused on common goals, such as innovations commercialized or communities reached. A strong KPI framework should include both quantitative and qualitative indicators to capture outcomes and experiences. It must also distinguish between individual partner contributions and joint achievements. This approach enhances accountability, transparency, and continuous learning across the partnership.

- Align KPIs with shared objectives (e.g., number of innovations commercialized, community beneficiaries reached).
- Include both quantitative and qualitative indicators.
- Track individual and joint partner contributions.

Sample MEL Framework

Objective	Indicator	Data Source	Frequency	Responsible
Expand Agritech reach	% increase in rural adoption	Field survey	Quarterly	PPP M&E Unit

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** What is the main purpose of a MEL framework in PPPs?
   a) To track progress and improve decision-making
   b) To promote competition between partners
   c) To ensure maximum profits
   d) To avoid reporting requirements
2. **True/False:** Joint performance indicators encourage collective ownership in PPPs.
3. **Short Answer:** Name one type of data collection method for PPP MEL.

Discussion Question

How can MEL frameworks in PPPs capture both financial returns for private actors and social benefits for communities?

TASK

MEL Matrix Group Task: Each group is to design a basic MEL Matrix for one PPP idea developed earlier. Focus on shared KPIs, data sources, and who is accountable.

Integrated Group Activities (Across Units)

1. **PPP Concept Design Exercise:** Each team is to design a full PPP proposal on a real-world issue (e.g., renewable energy for rural schools). Must include stakeholder map, roles, governance, resource plan, and MEL framework.
2. **Crisis Management Challenge:** Crisis cards simulate real issues (e.g., corruption scandal, funding delay). Teams respond using previously learned PPP tools.
3. **PPP Lifecycle Strategy Map:** Groups is to map out activities, roles, and challenges for each phase (initiation → implementation → closure) using color-coded timelines.

Once partnerships are in place, their value is maximized when they contribute to bringing research outputs into real-world applications. Strategic partnerships, particularly those involving industry actors, can open direct channels to markets, enabling smoother technology transfer and commercialization. Module 3 builds on the collaborative frameworks explored in Module 2 by focusing on how research outputs can be transformed into marketable products, services, or processes. The trust, governance structures, and mutual understanding developed through PPPs become critical assets in negotiating licenses, sharing intellectual property, and co-developing innovations for scale.

Facilitators Notes

a) Guide groups to co-create shared KPIs.

b) Stress balancing financial, social, and innovation metrics.

c) Encourage reflection on trust and transparency in joint MEL.

Suggestions for Further Reading

a) UNDP (2016). Handbook on Planning, Monitoring and Evaluating for Development Results.

b) Bamberger, M., Vaessen, J., & Raimondo, E. (2015). Dealing with Complexity in Development Evaluation.

MODULE THREE:
COMMERCIALIZATION OF RESEARCH RESULTS

Commercialization of research results is a strategic process through which discoveries and innovations emerging from publicly funded research are transformed into marketable goods, services, or processes that generate social and economic value. For Research and Innovation Funding Councils in West Africa, this process is not just about monetizing science; it is about ensuring that publicly funded knowledge reaches society and drives development. With increasing emphasis on impact and sustainability, Councils must now play an active role in facilitating technology transfer, managing intellectual property, and supporting innovation pathways such as licensing, spin-offs, joint ventures, and franchising. This module equips participants with practical knowledge, tools, and strategies for navigating the complex legal, financial, and strategic aspects of commercialization. It also contextualizes these practices within the realities of West Africa's research and innovation landscape, addressing issues such as IP valuation, contract design, and building commercialization partnerships.

Module Overview

Category	Summary
Objectives	Understand commercialization pathways and technology transfer processes. Conduct IP audits and value institutional IP. Navigate legal and commercial considerations. Select appropriate commercialization models.
Duration	Approx. 8 hours total (5 units @ 1.5–2 hours each)
Key Topics	- Research commercialization fundamentals. - Technology licensing steps.- IP audits and valuation.- Commercialization pathways (licensing, spin-offs, joint ventures).- Legal and commercial frameworks.
Target Participants	Council commercialization units, technology transfer officers, IP managers, and legal and contract officers.
Expected Outcomes	- Participants can develop commercialization plans.- Councils manage IP assets strategically.- Licensing agreements safeguard institutional interests.- Innovations reach markets effectively.

Training Objectives: By the end of this module, participants will be able to:

1.	Understand the principles and pathways of research commercialization and technology transfer.
2.	Analyze the steps involved in technology licensing and negotiation of IP rights.
3.	Evaluate intellectual property (IP) assets through audits and market assessments.
4.	Explore various commercialization models, including franchising, joint ventures, spinouts, and contract manufacturing.
5.	Apply learned concepts to practical cases and group activities relevant to West Africa.

Training Outcomes: The expected training Outcomes of this Module Include:

1.	Participants can explain and apply key commercialization pathways (e.g., licensing, spin-outs, joint ventures) tailored to their research outputs.
2.	Participants can conduct IP audits to identify, assess, and value intellectual property assets held by their institutions.
3.	Participants understand and apply the steps and legal considerations involved in technology licensing and contract negotiation.
4.	Councils develop practical commercialization plans incorporating market analysis, legal frameworks, and stakeholder engagement.

Facilitation Methods and Procedures

1. Session Flow

- a **Opening (10 mins):** Discuss the gap between research output and market adoption.
- b **Presentation (40 mins):** Explain IP protection, technology transfer, licensing models, and business planning.
- c **Case Study (20 mins):** Review a successful commercialization story from the region.
- d **Practical Activity (30 mins):** Teams assess the commercial viability of a research product.
- e **Wrap-Up (10 mins): Share learnings and Q&A.**

2. Key Discussion Points

- a Identifying market potential for research.
- b Intellectual property rights.
- c Licensing and technology transfer models.
- d Partnerships with industry.

3. Activities & Exercises

a. **Commercialization Pathway Mapping:** Participants map the steps from research to market.

b. **IP Audit Simulation:** Identify what can be protected in a sample research portfolio.

4. Facilitation Tips

a. Use relatable examples of local innovations.

b. Keep the discussion practical, avoiding legal jargon where possible.

5. Potential Challenges & Solutions

a. **Challenge:** Lack of understanding of IP laws.

b. **Solution:** Provide a simplified overview and resource list

Training Content

Below are the study units under this module:

Unit 3.1: Introduction to Research Commercialization, and Technology Transfer
Unit 3.2: Steps in Technology Licensing
Unit 3.3: Evaluating the Technology: Conducting an IP Audit
Unit 3.4: Important Legal and Commercial Considerations
Unit 3.5: Evaluating the Technology: Conducting an IP Audit

Unit 3.1: Introduction to Research Commercialization, and Technology Transfer

Session Duration: 1.5 hours

Format: Lecture, guided discussion, case examples

Commercialization refers to the process of transforming research findings and innovations into marketable products, services, or processes. Technology transfer is a crucial aspect of this process, involving the transfer of knowledge and technologies from research institutions to industry and society. It ensures that public investment in research delivers tangible economic and social benefits.

Technology Licensing: A Key Commercialization Tool

Definition and Application: Technology licensing is a legal agreement in which the rights to use intellectual property (IP), such as patents, copyrights, trademarks, and trade secrets, are granted to another party (the licensee) by the owner (the licensor).

Key Compensation Structures

One of the most critical components of any technology licensing agreement is the compensation structure, which determines how the licensor is rewarded for granting rights to use its intellectual property (IP). These compensation mechanisms can vary significantly depending on the nature of the technology, the market, and the negotiating power of each party. Each structure carries distinct financial, operational, and strategic implications for research institutions, companies, and funding councils alike, as presented below:

1. **A lump sum royalty:** This is a one-time, upfront payment for the right to use intellectual property. Simple to manage, provides immediate income, but forfeits future revenue from market growth.
2. **Running royalty:** Periodic payments based on sales or production. It aligns income with commercial success but requires ongoing tracking and reporting.
3. **Cross-licensing:** This refers to an exchange of IP rights between parties without monetary payment. It is helpful in combining complementary technologies, but generates no direct income.
4. **Equity-based compensation:** Here, the licensor receives company shares instead of, or alongside, cash. Allows participation in growth but carries financial risk if the company fails.
5. **Milestone payments:** This is triggered when specific goals are reached, such as regulatory approvals, first commercial sales, or revenue thresholds. It encourages progress but requires clear, measurable milestones.

In summary, the choice of compensation structure in technology licensing is not merely a financial issue; it reflects the level of risk, the market maturity of the technology, the strength of the relationship between parties, and the strategic objectives of the licensor. Research and innovation funding councils in West Africa must carefully consider these dimensions when designing or evaluating licensing frameworks, ensuring that they not only generate fair returns but also stimulate sustainable innovation and public benefit. Each compensation model carries both promise and pitfalls, and successful commercialization will often require hybrid arrangements tailored to the specific context of each transaction.

QUIZ TIME

Short QUIZ: Test Your Understanding

1. **Multiple Choice: Which of these is NOT a compensation structure in licensing?**
   a) Lump sum royalty
   b) Running royalty
   c) Equity-based compensation
   d) Informal handshake agreement
2. **True/False:** Technology transfer ensures publicly funded research benefits society.
3. **Short Answer:** Give one example of intellectual property (IP).

Discussion Question

What factors make the commercialization of research particularly challenging in the West African context, and how can councils address these challenges?

Facilitators Notes

a) Emphasize commercialization as societal value, not just profit.

b) Use local innovation examples (e.g., ICT hubs, agri-tech startups).

c) Compare commercialization pathways with group mapping.

Suggestions for Further Reading

a) Siegel, D., & Wright, M. (2015). Academic Entrepreneurship: Time for a Rethink? British Journal of Management.

b) AUTM (2020). Technology Transfer Practice Manual.

Unit 3.2 Steps in Technology Licensing

Session Duration: 2 hours

Format: Group drafting of licensing agreements, real-world scenario analysis

Licensing a technology involves more than just signing a contract,it is a structured and strategic process that ensures both parties (the licensor and licensee) are clear on what is being exchanged, under what conditions, and for what value. For research and innovation councils, understanding the key steps in technology licensing is essential for protecting public investments, promoting innovation, and ensuring sustainable benefits from intellectual property (IP) assets. Below are the key steps involved in a typical technology licensing process:

1. **Identify What is Being Licensed:** The first and foundational step is to clearly define the type of intellectual property being licensed. This could include patents, copyrights, trademarks, trade secrets, industrial designs, or combinations of these. Sometimes, even non-technical assets such as a software code, a logo, or a unique institutional brand name may be subject to licensing. For example, a university-developed water purification technology might involve a patent on the process, copyrighted training manuals, and a trade name for the product. All these components must be clearly listed and described in the licensing agreement. Misidentifying or vaguely defining the IP can lead to confusion, undervaluation, or legal disputes later.

2. **Define the Rights Being Conveyed:** Once the IP is identified, the next step is to define the scope of rights being granted to the licensee. This typically includes the right to use, make, sell, distribute, or even modify the licensed technology. Some licenses are limited to manufacturing, others to distribution, and some may include full commercialization rights. It's important to specify what the licensee is allowed and not allowed to do. For instance, a research council may grant a private firm the right to manufacture and distribute a diagnostic kit but restrict them from sublicensing it to third parties. The more precisely these rights are described, the better protected the licensor's interests will be.

3. **Determine the Type of License:** Exclusive, Non-exclusive, or Partial: The degree of exclusivity is a key decision in licensing. An exclusive license grants only one licensee the right to use the IP, often in exchange for a higher royalty or equity participation. A non-exclusive license allows the IP owner to license the technology to multiple parties simultaneously, thereby promoting broader dissemination. In some cases, a partially exclusive license might be granted,for example, exclusive rights within a certain sector or region, but non-exclusive rights elsewhere. Each option has strategic implications. For instance, granting exclusive rights to one company might ensure focused investment in marketing and product development, but it also reduces wider uptake.

4. **Specify Geographic Scope:** A license can be limited by territory or geography, which helps the licensor maintain control and maximize value across different markets. For instance, a West African research institution might license a crop variety exclusively for use in West Africa, while licensing it non-exclusively or differently in East Africa or Europe. Geographic limitations also reduce the risk of overlapping market claims, price distortions, or regulatory conflicts. These boundaries should be clearly stated in the agreement and aligned with the capacity of the licensee to operate in the specified territory.

5. **Define Field-of-Use Restrictions:** In addition to geography, field-of-use restrictions specify the sector or application in which the licensee may use the technology. For example, a particular enzyme technology may be licensed for use in agriculture but not in the pharmaceutical industry.Such restrictions help tailor the licensing deal to the licensee's expertise while allowing the licensor to pursue other opportunities in different industries. This strategic segmentation can maximize value while preventing monopolization of the technology beyond the licensee's capability.

6. **Address Sublicensing Rights:** Another crucial step is deciding whether the licensee will have the right to sublicense the technology to third parties. Sublicensing may be essential if the licensee operates through distributors or needs manufacturing partners. If sublicensing is allowed, the conditions under which it can occur must be clearly defined. This includes whether the licensor must approve each sublicense, whether royalties from sublicenses must be shared, and how quality and compliance will be monitored. Failing to regulate sublicensing can result in loss of control over the IP's use and quality.

7. **Include Assignment Clauses:** An assignment clause determines what happens to the license if the licensee is acquired, merges with another company, or restructures. Without such a clause, the license may be rendered void or be transferred without the licensor's consent. For public institutions, this step is particularly important to ensure that public assets are not inadvertently transferred to foreign or unqualified entities. A well-drafted assignment clause helps protect the strategic intent of the licensing arrangement.

8. **Structure Compensation and Financial Terms:** The licensing agreement must outline how the licensor will be compensated, whether through lump sum payments, running royalties, equity, milestone payments, or a mix of these. The structure chosen must match the licensee's capacity and the licensor's goals. This step requires careful financial modeling and consideration of market size, commercialization timelines, and enforcement costs. Clauses on payment schedules, auditing rights, penalties for non-payment, and mechanisms for currency exchange (especially in cross-border deals) must also be included.

9. **Address Other Legal and Commercial Provisions:** Beyond IP and financial terms, several additional provisions must be negotiated and included. These include:

a) **Confidentiality clauses** to protect trade secrets and non-public information.

b) **Dispute resolution mechanisms** to handle disagreements without lengthy litigation.

c) **Patent prosecution and maintenance responsibilities,** especially when the IP spans multiple jurisdictions.

d) Enforcement clauses to determine who pursues infringement cases and bears the costs.

Failure to address these issues at the outset can create significant legal vulnerabilities and financial liabilities for the licensor. In essence, licensing a technology is a strategic transaction that requires careful planning, legal expertise, and market awareness. Each step in the process,from identifying the IP to defining rights, restrictions, and compensation,must be approached with clarity and purpose. For West African research and innovation councils, mastering these steps will not only improve institutional revenue and reputation but also ensure that publicly funded innovations are effectively brought to market for the benefit of society.

EXAMPLE

A university licenses agricultural drone software to a local agritech startup with regional usage rights and royalty payments.

Case Studies for Discussion

a) **Côte d'Ivoire:** Researchers at Félix Houphouët-Boigny University developed and licensed a new cocoa disease-resistant variety to local cooperatives. This case highlights technology licensing and IP use in agriculture.

b) **Nigeria:** Covenant University's Centre for Innovation and Discovery has spun off multiple student-led startups in ICT and renewable energy, illustrating the spin-out pathway for commercialization.

Analyzing Market Potential for Commercialization

Successful commercialization requires understanding the market:

a. **Market size:** e.g., a 20 million vs. 300 million consumer base.

b. **Customer demand** and **purchasing power.**

c. **Competitive landscape:** Who are the existing players?

d. **Infrastructure:** Ports, logistics, ICT systems.

e. **Legal and regulatory frameworks** (both local and international).

f. **Analytical tools:** SWOT and PESTEL analysis.

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Field-of-use restrictions limit:
   a) Geographic areas only
   b) Industry sector or application
   c) Number of partners
   d) The size of the budget
2. **True/False:** Non-exclusive licenses allow multiple licensees to use the same IP.
3. **Short Answer:** Name one clause that protects against unauthorized transfer of licenses.

Discussion Question

What risks do councils face when granting exclusive licenses to private firms, and how can these risks be mitigated?

Group Task:

Conduct a SWOT analysis for commercializing a solar-powered water purification system in your Country.

Facilitators Notes

a) Walk participants through a mock licensing negotiation.

b) Highlight exclusivity, territory, and sublicensing with examples.

Stress the balance between public benefit and private incentive.

Suggestions for Further Reading

a) WIPO (2020). Licensing Guide for Technology Managers. Geneva: World Intellectual Property Organization.

b) OECD (2013). Commercialising Public Research: New Trends and Strategies.

Unit 3.3: Evaluating the Technology: Conducting an IP Audit

Session Duration: 1.5 hours

Format: Audit exercise, walkthrough of IP audit template, group SWOT

Before any technology can be licensed, sold, or commercialized, a comprehensive evaluation must be undertaken to understand exactly what intellectual property (IP) exists, who owns it, and how it can be used. This evaluation is referred to as an IP audit. For research institutions and funding councils, conducting a rigorous IP audit is a critical first step in the commercialization process. It not only safeguards institutional interests but also ensures that the right assets are leveraged for maximum value. An IP audit is much more than simply checking whether patents have been registered. It involves taking stock of all tangible and intangible assets that may carry commercial or legal value, regardless of whether they are formally protected or not. The following are important steps in an IP audit:

1. Identify All Registered IP: The first task in an IP audit is to catalogue all registered intellectual property rights owned by the institution. These include:

a. Patents (for inventions and processes),

b. Trademarks (for names, logos, and symbols),

c. Industrial designs (for aesthetic aspects of products),

d. Copyrights (for written content, software, multimedia, training manuals, etc.), and

e. Plant variety protection rights, where applicable.

This information should include the title, registration number, date of filing, status (granted or pending), jurisdiction (local or international), and named inventors. For instance, a university may discover it has granted patents for a soil testing kit in Nigeria and a pending trademark for the kit's brand name in Ghana. Understanding what is formally protected helps determine the institution's legal authority to license or enforce those rights. It also highlights gaps, for example, IP developed by staff that has not been protected due to resource constraints or a lack of awareness.

2. Document Unregistered IP Assets: Equally important is the identification of unregistered or informal IP, which often goes unnoticed but can hold significant commercial value. These include:

a. Trade secrets, such as unique formulations, databases, or algorithms,

b. Know-how developed during research activities,

c. Institutional emblems, colours, or slogans, and

d. Distinctive names used by departments, labs, or special projects (e.g., the name of a research group or a student innovation hub).

Although not registered, these assets may still be protected through confidentiality agreements, internal policies, or later formalization. For instance, a lab's proprietary method for extracting bio-oil from algae may not yet be patented but could be protected as a trade secret or a future patent application.

3. **Review Third-Party IP In Use:** Another crucial aspect of the audit is to examine IP used under license from other entities. Institutions often use tools, software, genetic material, or research instruments developed externally and licensed for academic use. The audit should clarify:

   a. What third-party IP is being used?
   b. Under what terms is it licensed (research use only, commercial use allowed, time-limited, etc.)?
   c. Are there restrictions that would prevent commercialization of derivative products?

   Failing to understand these terms can lead to IP infringement or limit the ability to license improvements built on external IP.

4. **Verify Ownership and Authorship:** Ownership of IP must be clearly established. This includes:

   a. Confirming that the institution holds rights to the IP created by its staff or students,
   b. Ensuring appropriate IP clauses are embedded in employment contracts, student agreements, and collaborative research agreements,
   c. Investigating co-ownership situations, such as joint IP developed with international partners or industry collaborators.

   Disputes over ownership often arise when such arrangements are unclear, especially in multi-partner research. For example, a seed technology developed by researchers in Côte d'Ivoire under a regional partnership must clarify whether the ownership lies with the local institution, the funding agency, or the consortium.

5. **Catalogue Institutional Creative Outputs:** The IP audit should also include creative and operational assets of the institution that may have commercialization potential or strategic value. These could include:

   a. **Software programs** developed by faculty or students,
   b. **Training manuals, e-learning content, and multimedia**, which could be packaged for sale,
   c. **Institutional anthems, slogans, or promotional jingles,**
   d. **Client databases, internal quality procedures, compliance systems,** and more.

Many of these are often overlooked yet qualify as copyrightable material or trade secrets. For instance, a university's comprehensive online agribusiness training program could be licensed to NGOs or agricultural extension agencies.

6. Assess the Condition and Relevance of Each IP Asset: Beyond listing assets, the audit must evaluate:

a. **The commercial relevance of each IP** (Is it in demand? Is it scalable?),
b. **The enforceability** of rights (Are patents expired or still valid? Are trademarks being used correctly?),
c. **Any pending legal issues or disputes,** and
d. **The readiness level** of the technology (Has it been tested? Is it production-ready?).

This assessment helps prioritize which technologies to commercialize, which need further development or protection, and which are not viable for market use.

Why IP Audits Matter for Commercialization
Conducting a comprehensive IP audit helps institutions and councils make informed decisions about which assets to promote, protect, license, or spin out. It provides the foundation for:

a. **IP valuation,** which determines what the technology is worth,
b. **Technology licensing,** by confirming ownership and scope of rights,
c. **Fundraising and investment,** where IP can serve as collateral or attract interest,
d. **Strategic planning,** by identifying research strengths and innovation gaps.

Moreover, in regions where IP management is still emerging, like many parts of West Africa, institutionalizing regular IP audits ensures transparency, accountability, and preparedness for technology transfer opportunities, whether with local industry or international partners. Even internal documents, client databases, and internal procedures should be protected as trade secrets.

EXAMPLE

A university's anthem, slogan, and training software are included in its IP audit.

Valuing Intellectual Property (IP)
IP valuation is critical for:

a. Contract negotiations (licensing, assignment).
b. Dispute resolution.

c. Asset valuation during liquidation.

d. Using IP as collateral.

e. Attracting investors.

f. Tax reporting and institutional restructuring.

QUIZ TIME

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Which is NOT part of an IP audit?
   a) Identifying registered IP
   b) Reviewing unregistered assets
   c) Ignoring third-party IP use
   d) Verifying ownership
2. **True/False:** Trade secrets can be part of unregistered IP.
3. **Short Answer:** Give one benefit of conducting an IP audit.

Discussion Question

Why do many research institutions in West Africa fail to identify or protect their intellectual property, and how can councils help change this trend?

Case Activity:

Value a patent on a herbal remedy based on projected market value, production cost, and customer demand.

Facilitators Notes

a) Use the WIPO IP audit template in class.

b) Highlight undervalued assets (e.g., software, training manuals).

c) Encourage councils to institutionalize regular audits.

Suggestions for Further Reading

a) WIPO (2018). IP Audit Tool: A Practical Guide for Institutions.

b) Markman, G., et al. (2005). "Entrepreneurship and University-Based Technology Transfer." Journal of Business Venturing, 20(2).

Unit 3.4: Exploring Commercialization Pathways

Session Duration: 1.5 hours

Format: Strategy mapping exercise, group work (mock commercialization plan)

Exploring commercialization pathways helps researchers and funding councils identify the most viable routes, such as licensing, spin-offs, joint ventures, or industry partnerships, for scaling innovations. This session introduces key pathways and the strategic considerations for selecting and navigating them effectively within the West African context.

a **Joint Ventures:** A partnership where a research institution and private firm pool technology and finance. They may form a separate company or collaborate under formal terms.

EXAMPLE A university and agro-processing company create a joint venture for packaging and distributing fortified foods.

b **Franchising:** Allows replication of business models using institutional IP. The franchisee pays fees and royalties, while the franchisor provides know-how.

EXAMPLE A university that develops a rural telemedicine model franchises it to health centers across the region.

c **In-House Production:** The institution manufactures and sells directly. While this allows for control, it may limit scale.

EXAMPLE University of Nairobi's Biofix fertilizer was constrained until they partnered with a company to scale.

d **Spin-outs and Start-ups:** Spin-outs are institution-owned companies created to commercialize internal research. Start-ups, on the other hand, are external companies founded by entrepreneurs to commercialize institutional research.

EXAMPLE A biotechnology spinout commercializing a diagnostic test developed in a university lab.

e **Contract Manufacturing:** The institution outsources manufacturing to a third party while retaining IP rights.

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Which pathway involves creating a new company jointly owned by partners?
   a) Joint venture
   b) Licensing
   c) Franchising
   d) Spin-off
2. **True/False:** Franchising replicates a business model using institutional IP.
3. **Short Answer:** Name one factor to consider when selecting a commercialization pathway.

Discussion Question

Which commercialization pathway (licensing, spin-offs, joint ventures, franchising) do you think is most viable in your country, and why?

Facilitators Notes

a) Facilitate small-group choice of pathway (spin-off, JV, licensing).

b) Stress alignment with market realities and council mandates.

c) Encourage critical reflection on risks and scalability.

Suggestions for Further Reading

a) Thursby, J., & Kemp, S. (2002). “Growth and Productive Efficiency in University Licensing.” Research Policy, 31(1).

b) OECD (2019). University Technology Transfer and Commercialisation.

Unit 3.5: Important Legal and Commercial Considerations

Session Duration: 2 hours

Format: Lecture, contract analysis, individual drafting of legal clauses

Technology licensing is not just a technical or financial transaction,it is deeply embedded in a legal and commercial framework that governs the behavior, responsibilities, and rights of both the licensor and the licensee. Ignoring or underestimating these considerations can lead to serious legal disputes, regulatory violations, or commercial failures. As such, every licensing agreement must include provisions that anticipate legal risks and protect the commercial integrity of the transaction. Below are the most critical legal and commercial considerations to address in every technology licensing agreement:

1. **Confidentiality and Non-Disclosure Clauses:** One of the cornerstones of technology licensing is the protection of confidential information. During negotiations and after the agreement is signed, the licensor often shares technical data, experimental results, processes, or business strategies that must remain confidential. A confidentiality clause, often formalized in a Non-Disclosure Agreement (NDA), ensures that such information is not disclosed to third parties or used beyond the agreed scope. It typically defines:

   a) What information is considered confidential,

   b) The duration of confidentiality obligations (commonly 3 to 10 years),

   c) Permitted disclosures (e.g., to employees, investors under similar obligations),

   d) Remedies for breach (e.g., injunctive relief or damages).

   For public institutions, especially universities and councils, confidentiality is crucial when the technology has not yet been patented or when partners include private firms with competing interests.

2. **Export Control and Regulatory Compliance:** In many cases, the licensed technology may be subject to export control laws or other national regulations, especially if it has potential military, agricultural, or health-related applications. The licensor must understand whether local or international laws restrict the transfer or sale of the technology to certain regions, organizations, or countries. For example, biotechnology tools developed in a Nigerian research institute might be prohibited for export to countries under international sanctions. In such cases, the agreement must:

   a) Identify any applicable export restrictions,

   b) Assign responsibility for obtaining necessary licenses or approvals,

   c) Include clauses that terminate the agreement if regulatory violations occur.

   Failure to comply can result in severe penalties, including loss of funding, blacklisting by international partners, or criminal charges.

3. **Patent Prosecution and Maintenance Responsibilities:** When licensing patented technology, or technology that is expected to be patented, one key question is who bears the cost and responsibility of managing the patent. This includes:

a) Filing the patent application in different countries,
b) Responding to examiner objections,
c) Paying maintenance or renewal fees.

In many cases, the licensor retains these responsibilities but may allow the licensee to manage prosecution in foreign markets at their own cost. It's critical to specify:

a) Who pays for what,
b) Who has the authority to make legal decisions about the patent,
c) Whether the licensee is allowed to file improvements or derivative patents,
d) How costs are shared in jurisdictions where both parties have commercial interests.

Mismanagement of patents, such as missed renewals or poorly filed applications, can invalidate IP rights and undermine commercialization efforts.

4. **Enforcement and Infringement Handling:** Another major consideration is how infringement will be handled. If a third party copies or illegally uses the licensed technology, who is responsible for taking legal action? The agreement should define:

   a) Whether the licensor or licensee has standing to sue for infringement,
   b) Who bears the cost of litigation,
   c) How recovered damages are shared,
   d) Whether the licensee is obligated to notify the licensor of known infringement.

   In some exclusive licenses, the licensee may be expected to defend the IP rights in specific territories, while in non-exclusive licenses, the licensor may retain full enforcement authority. Without clarity, both parties may either neglect enforcement or duplicate efforts inefficiently.

5. **Assignment and Change of Control Clauses:** Technology licensing agreements must anticipate the possibility of organizational changes, such as mergers, acquisitions, or restructuring. An assignment clause defines whether the license can be transferred to another party, such as a new owner of the licensee, or whether it terminates automatically upon such change. For public institutions, this clause is crucial to ensure that control over publicly funded IP does not unintentionally shift to a private entity without consent. For example, a licensee acquired by a multinational may change the original intentions of the licensing agreement, perhaps shifting production abroad or changing the target market. Assignment clauses usually require the licensor's written consent before the licensee can transfer their rights.

6. **Dispute Resolution Mechanisms: Disagreements are inevitable in long-term partnerships. Including a dispute res**olution clause helps resolve issues without resorting to costly and time-consuming court battles. Key issues to define include:

a) **Jurisdiction:** Which country's laws will apply?

b) **Venue:** Where will disputes be heard?

c) **Method:** Will disputes be resolved via arbitration, mediation, or litigation?

d) **Language:** Which language will be used in proceedings?

For international agreements, arbitration is often preferred due to its confidentiality and speed. Councils and universities should also consider aligning their dispute processes with their internal legal policies or the laws of the host country.

7. **Force Majeure and Termination Provisions:** The agreement must also include force majeure clauses that cover unexpected events such as war, pandemics, or natural disasters that prevent performance. Additionally, termination clauses define the conditions under which either party can end the agreement, for instance, breach of contract, insolvency, or failure to meet sales targets. Termination provisions should include:

a) Notice periods (e.g., 60 days),

b) Cure periods to remedy any breach,

c) Post-termination obligations (e.g., return of confidential materials, continued royalties

on stock sold after termination).

For public institutions, especially universities and councils, confidentiality is crucial when the technology has not yet been patented or when partners include private firms with competing interests.

2. Such clauses protect both parties from unforeseen risks and provide legal clarity if the relationship needs to end prematurely. Legal and commercial considerations are not optional extras in technology licensing, they are the legal guardrails that ensure the transaction is enforceable, ethical, and financially viable. For West African innovation funding councils, integrating these clauses into every licensing agreement will ensure institutional IP is protected, national interests are upheld, and commercial partners act in good faith. Failure to address these areas can result in IP loss, commercial failure, or reputational damage to the public institution.

Short QUIZ: Test Your Understanding

Multiple Choice: Which of the following is NOT typically a legal consideration in technology commercialization?

a) Intellectual property protection

b) Licensing agreements

c) Field-of-use restrictions

d) Choosing a company logo color

True/False: A well-drafted licensing agreement should include dispute resolution clauses.

Short Answer: Name one commercial factor that can influence the choice of a licensing partner.

Discussion Question

How can councils strike a balance between protecting IP rights and encouraging wider societal access to innovations (e.g., in health or agriculture)?

Group Activity:

Draft a sample licensing agreement including IP rights, royalties, confidentiality, and dispute resolution clauses.

Case Studies for Discussion

a) **Biofix (Kenya)**
Discuss the university-led initiative in producing organic fertilizer, the challenges faced under in-house production, and the impact of transitioning to an industry partner.

b) Smuscan and Smugel (Kenya)
Explore the manufacturing collaboration between Universal Ltd and a research institute and the importance of clear IP and manufacturing agreements.

Individual Assignment:

Select a piece of research or innovation from your institution and outline a commercialization plan. Include:

1. Type of IP involved.
2. Licensing or commercialization pathway.
3. Market analysis (SWOT).
4. Proposed partners or investors.
5. Legal considerations.

Group Assignment:

Select a piece of research or innovation from your institution and outline a comEach group is tasked with developing a mock business plan for a university spin-out that will produce and distribute a low-cost medical diagnostic kit to rural clinics in West Africa.
mercialization plan. Include:

Commercializing research results ensures innovation reaches society and contributes to economic development. Institutions must strategically manage their IP, evaluate markets, and select the right pathway, whether licensing, start-up, or joint venture, to maximize impact. Commercialization strategies are most effective when they benefit the widest possible segment of society. Integrating Gender Equality and Social Inclusion (GESI) considerations ensures that research-derived innovations are not only profitable but also equitable. Module 4 builds directly on the commercialization pathways discussed in Module 3 by emphasizing how to design, implement, and evaluate research and innovation processes so that women, marginalized groups, and underrepresented stakeholders share in the benefits. This transition marks a shift from purely technical and market-oriented approaches to ones that are also socially responsive and inclusive.

Facilitators Notes

a)Use a mock MoU/contract review exercise.

b)Highlight dispute resolution, IP ownership, and compliance.

c)Stress due diligence and legal safeguards.

Suggestions for Further Reading

a) IP Australia (2019). Commercialisation Guide.

b) Hagedoorn, J., & Zobel, A. (2015). “Contract Law and Technology Licensing.” Research Policy, 44(5).

MODULE FOUR:

GENDER EQUALITY AND SOCIAL INCLUSION STRATEGIES IN GRANTING AND COUNCILS' INTERNAL PROCESSES

Promoting gender equality and social inclusion (GESI) within research funding systems is essential to ensuring that innovation benefits all segments of society. In many West African contexts, structural inequalities and unconscious biases have led to the exclusion of women, early-career researchers, persons with disabilities, and other marginalized groups from fully participating in and benefiting from research opportunities. This module provides Research and Innovation Funding Councils with practical strategies to embed GESI principles across both their internal operations and external grant-making processes. By institutionalizing GESI approaches, Councils can enhance fairness, expand access, and ensure that the research they fund is both socially responsive and developmentally impactful.

Module Overview

Category	Summary
Objectives	◆ Define and apply key gender concepts. ◆ Address unconscious bias and promote inclusive leadership. ◆ Integrate gender equity in funding calls and reviews. ◆ Institutionalize gender mainstreaming.
Duration	Approx. 7.5 hours total (5 units @ 1.5 hours each)
Key Topics	- Gender concepts and importance in councils.- Unconscious bias and inclusive leadership.- Gender equity in funding.- Institutional reforms for GESI.- Sustaining gender mainstreaming.
Target Participants	Council leadership, HR and policy officers, grants managers, and diversity and inclusion focal persons.
Expected Outcomes	- Councils adopt gender-responsive policies.- Bias is reduced in decision-making processes.- Increased participation of underrepresented groups.- Gender mainstreaming action plans implemented.

Training Objectives: By the end of this module, participants will be able to:

1.	Understand and define key gender-related concepts.
2.	Recognize how power, privilege, and unconscious bias affect gender dynamics within Research and Innovation Councils.
3.	Identify institutional entry points for mainstreaming gender within Council structures, personnel, and outcomes.
4.	Apply gender-responsive strategies in funding processes, including proposal reviews and grant-making decisions.
5.	Develop a Gender Mainstreaming Action Plan for internal Council operations.

Training Outcomes: The expected training Outcomes of this Module Include:

1.	Participants can define key gender concepts and identify institutional gaps in promoting inclusion and equity.
2.	Councils adopt and implement inclusive practices to address unconscious bias and promote gender-sensitive leadership.
3.	Participants integrate gender equity considerations into grant-making processes, including call design, review, and selection criteria.
4.	Participants develop Gender Mainstreaming Action Plans with concrete institutional reforms, indicators, and monitoring tools.

Facilitation Methods and Procedures

1. Session Flow

a. **Opening (5 mins):** Frame GESI as essential for equitable research impact.

b. **Presentation (30 mins):** Explain gender concepts, unconscious bias, inclusive leadership, and institutional mainstreaming.

c. **Activity (20 mins):** Participants share examples of gender bias in research funding calls.

d. **Case Study (20 mins):** Review a council that successfully integrated GESI.

e. **Group Exercise (30 mins):** Revise a sample funding call to be gender-responsive.

f. **Closing (10 mins):** Summarize and assign action points.

2. Key Discussion Points

a. Gender equity in funding and peer review.

b. Strategies for mainstreaming GESI.

c. Overcoming institutional resistance.

3. Activities & Exercises

a. **Bias Spotting:** Identify non-inclusive language in sample documents.

b. **GESI Action Planning:** Create a plan for improving inclusivity in participants' institutions.

4. Facilitation Tips

a. Be sensitive to different cultural perspectives.

b. Use neutral language while challenging biases.

5. Potential Challenges & Solutions

a. **Challenge:** Resistance to change.

b. **Solution:** Present evidence of GESI benefits to research quality and impact

Training Content
Below are the study units under this module:

Unit 4.1: Understanding Gender Concepts and Why They Matter in Councils

Unit 4.2: Unconscious Bias and Inclusive Leadership in Councils

Unit 4.3: Gender Equity in Funding Calls and Peer Review

Unit 4.4: Institutionalizing Gender Mainstreaming

Unit 4.5: Addressing Challenges and Sustaining Gender Mainstreaming

Unit 4.1: Understanding Gender Concepts and Why They Matter in Council

Session Duration: 1.5 hours

Format: Interactive lecture, matrix mapping of workplace dynamics

Understanding gender concepts is essential for ensuring that Research and Innovation Councils create fair and inclusive environments. Gender shapes how individuals access opportunities, resources, and decision-making power. By grasping the distinctions between gender, sex, equality, and equity and recognizing how these intersect with other social factors, Councils can identify hidden biases and design internal processes that promote justice, innovation, and impact for all. Below are some key concepts in the gender discourse:

a. **Sex vs Gender:** Sex refers to biological differences between males and females, assigned at birth and generally static. Gender, on the other hand, refers to socially constructed roles and expectations that vary across cultures and time. Understanding this difference is crucial for distinguishing between natural differences and systemic inequalities.

b. **Gender Equality vs Equity:** Equality means giving everyone the same resources or opportunities. Equity means providing resources based on the needs of individuals or groups to ensure fairness. Councils must embrace equity to support disadvantaged groups who may not start from the same position.

c. **Intersectionality:** This concept explains how different social identities (e.g., gender, ethnicity, disability, indigeneity) intersect to create unique experiences of discrimination or privilege. Councils must adopt an intersectional lens to capture the full spectrum of marginalization in their policies and actions.

Group Task:

Participants share observations of gender-based exclusion in their workplace and map the intersectional dimensions involved (e.g., rural women researchers or young female professionals in male-dominated fields).

Gender Approaches and Strategies for Mainstreaming

Gender Approaches and SEffective gender mainstreaming begins with understanding the different ways organizations can respond to gender inequality. From being gender-blind to adopting gender-transformative approaches, each strategy reflects a level of awareness and action. By applying the right tools, such as gender analysis, audits, and budgeting, Councils can embed gender equality into their policies, programs, and culture to drive meaningful institutional change. The following are the gender mainstreaming approaches:
trategies for Mainstreaming

a. **Gender-blind:** This approach ignores gender differences and assumes neutrality, which often perpetuates existing inequalities. Councils applying this approach risk reinforcing the status quo.

b. **Gender-sensitive:** Acknowledges gender differences but fails to address them. This is a starting point, but it is insufficient for achieving equity.

c. **Gender-responsive:** Recognizes gender gaps and implements strategies to address them, such as targeted recruitment or mentorship programs.

d. **Gender-transformative:** Goes beyond addressing symptoms to transforming the root causes of gender inequality, such as institutional cultures and norms.

Key Tools for gender mainstreaming:

a) Gender Analysis: Examines gender roles and power relations to inform decision-making.

b) Gender Budgeting: Allocates financial resources to promote gender equity.

c) Gender Audit: Evaluates organizational systems, processes, and culture from a gender perspective.

d) Engaging Men and Boys: Encourages inclusive practices and shared responsibility for equity.

Case Study:

Analyze a Council's HR policy using a gender audit framework to identify blind spots and suggest improvements.

Entry Points for Mainstreaming Gender in Council Internal Processes

a. **Structures:** Councils should institutionalize gender by creating a gender unit or focal person, including gender considerations in strategic and operational plans, and ensuring gender is part of data systems and performance monitoring tools.

b. **Personnel:** Mainstreaming should involve equitable hiring, retention, and promotion practices. Councils should conduct regular gender training, promote inclusive work environments, and assess staff capacity on gender issues.

c. **Results and Outputs:** Council outputs, such as grants awarded, policies developed, or partnerships formed, should be evaluated for their gender impact. Councils should define gender indicators and targets in their results framework.

Multiple Choice: Gender equality ensures:

a) Equal resources and opportunities for all genders

b) Women always receive more than men

c) Only women are supported

d) Men dominate decision-making

True/False: GESI strategies should be part of council policies.

Short Answer: Give one reason gender inclusion is important in research councils.

Discussion Question

Why is it important for research funding councils to go beyond "gender balance" and focus on deeper structural inequalities in their funding processes?

Group Task:

Using a 3-column matrix (Structures, Personnel, Results), participants assess their Councils' readiness and gaps for gender mainstreaming.

Facilitators Notes

a) Begin with an interactive "myths vs. facts" activity.

b) Emphasize why equity strengthens research quality.

c) Use local data on women's participation in research.

Suggestions for Further Reading

a) UN Women (2018). Turning Promises into Action: Gender Equality in the 2030 Agenda.

b) World Bank (2012). World Development Report: Gender Equality and Development.

Unit 4.2: Unconscious Bias and Inclusive Leadership in Councils

Session Duration: 1.5 hours

Format: Scenario-based group discussion, leadership reflection tools

Unconscious bias refers to automatic, unintentional attitudes or stereotypes that influence how we perceive and interact with others. In Research and Innovation Councils, these biases can negatively affect hiring, funding, promotions, and leadership decisions, even when decision-makers believe they are being objective.

Examples of Unconscious Bias in Councils:

1. Bias in Grant Review Processes

a) A female researcher and a male researcher submit identical proposals. Despite having the same qualifications, the male applicant is perceived as more competent or leader-like.

b) Studies have shown that female Principal Investigators (PIs) are sometimes rated lower than their male counterparts with similar or lesser credentials, simply due to gender assumptions.

2. Bias in Hiring and Promotion

a) A panel unconsciously favors candidates from prestigious universities or with dominant personalities, often associated with male leadership styles.

b) Women in administrative or mid-level roles may be overlooked for senior positions because of stereotypes that question their ability to handle high-pressure decision-making.

3. Devaluing Women's Experiences

a) During project evaluations or brainstorming sessions, female staff ideas may be sidelined or attributed to male colleagues. This perpetuates the belief that women contribute less, even when evidence says otherwise.

4. Overlooking Early-Career and Minority Researchers

a) Researchers from lesser-known institutions or from marginalized communities may be assumed to be less capable, leading to their proposals receiving less attention or lower scores.

Inclusive Leadership in Councils

Inclusive leadership means intentionally leading in a way that values diversity, actively addresses exclusion, and creates an environment where all voices are heard and respected. In the context of Councils, it's about using leadership influence to transform systems that reproduce inequality.

Key Features of Inclusive Leadership:

Modeling Equity Principles: Leaders who visibly challenge discriminatory practices, advocate for inclusive hiring, and ensure women are represented in decision-making bodies.

Empowering Others: Providing mentorship to young and female staff, supporting flexible work arrangements, and recognizing the contributions of staff across all roles and identities.

Challenging Patriarchal Norms: Revising policies that reinforce male-dominated leadership hierarchies. For example, restructuring committees to ensure gender balance and giving speaking opportunities to junior or minority staff during board meetings.

Rewarding Inclusive Behavior; Recognizing staff who contribute to GESI (Gender Equality and Social Inclusion) outcomes, such as those who mentor women researchers or who revise call guidelines to make them more inclusive.

EXAMPLE

Example of Inclusive Leadership in Practice:

A Council Director notices that most funding recipients over the past three years have been from urban-based, male-led institutions. She initiates a review, introduces gender-sensitive eligibility criteria, and creates a mentorship scheme for young female researchers. She also ensures that peer review panels are trained in unconscious bias and include gender-diverse members. This not only improves fairness but enriches the quality and diversity of funded research.

Unconscious bias can quietly undermine the integrity and fairness of Councils, while inclusive leadership can reverse these effects by promoting equity, trust, and innovation. By recognizing and addressing bias, and practicing inclusive leadership, Councils can build more diverse, effective, and socially responsive institutions.

Transformative Leadership: Leaders must model inclusive values, challenge discriminatory norms, and create spaces for marginalized voices. Leadership should be active in mentoring, policy reforms, and reward systems for equity.

QUIZ TIME

Short QUIZ: Test Your Understanding

Multiple Choice: Unconscious bias refers to:

a) Intentional discrimination

b) Hidden stereotypes that influence actions

c) Clear and deliberate policies

d) Transparent leadership

True/False: Inclusive leadership actively removes barriers for underrepresented groups.

Short Answer: Give one way to reduce unconscious bias in peer review.

Discussion Question

What are some examples of unconscious bias you have observed in funding or peer review decisions, and how could councils address them?

Group Exercise:
Participants reflect on situations where unconscious bias may have affected decisions in their Councils and develop mitigation strategies.

Facilitators Notes

a) Run a quick implicit bias exercise or scenario role-play.

b) Discuss leadership practices that model inclusivity.

c) Encourage councils to develop bias-awareness workshops.

Suggestions for Further Reading

a) Carnes, M., et al. (2015). "The Effect of an Intervention to Break the Gender Bias Habit." Academic Medicine.

b) Catalyst (2019). Unconscious Bias: A Practical Guide for Leaders.

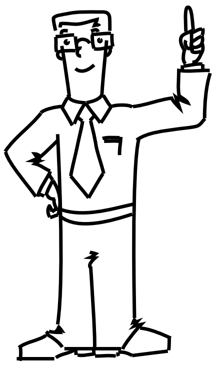
Unit 4.3: Gender Equity in Funding Calls and Peer Review

Session Duration: 1.5 hours

Format: Group task (design inclusive grant call), peer review panel simulation

Mainstreaming gender equity in funding calls and peer review processes is essential to creating a fair, transparent, and inclusive research environment. Without deliberate attention to gender and social inclusion, funding mechanisms can unintentionally reinforce existing disparities, excluding women, early-career researchers, persons with disabilities, and institutions from disadvantaged regions. Below is a detailed explanation of each phase of the grant funding lifecycle and how gender equity can be applied at each stage:

1. **Funding Call Design:** The language, eligibility criteria, and dissemination strategy of a funding call significantly affect who applies and who feels encouraged or excluded. Subtle wording biases can dissuade women and other underrepresented groups from applying.



Examples:

a) A call requiring "a strong track record in international publications" may discourage early-career or female researchers who may have had fewer opportunities.

b) Using gender-neutral or inclusive language ("researchers from all backgrounds are encouraged") can signal openness and accessibility.

c) If the call is only published in academic journals or English-only websites, it may exclude non-English speakers or researchers from rural institutions.

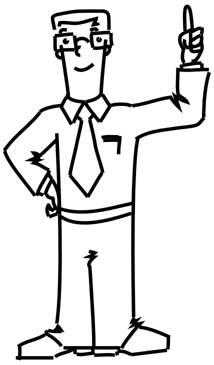
Best Practices:

a) Use clear, inclusive language.

b) State that applications from women, young researchers, and underrepresented institutions are encouraged.

c) Disseminate calls widely,including on social media, local universities, and minority researcher networks.

2. **Preparing Applications:** Even when a call is open, systemic barriers may prevent women or under-resourced applicants from preparing competitive proposals.



Examples:

a) Female researchers in junior roles may be overburdened with administrative duties and have little time to prepare proposals.

b) Researchers in smaller institutions may lack proposal-writing experience or access to mentors.

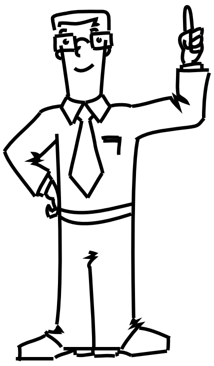
Best Practices:

a) Provide proposal development workshops, especially targeted at female and early-career researchers.

b) Offer extended timelines or simplified templates for institutions with limited capacity.

c) Create internal support systems or mentorship initiatives to help disadvantaged applicants develop their proposals.

3. **Preparing the Review Process:** Peer reviewers and panel members must be carefully selected and trained to ensure fair assessment.



Examples:

a) Review panels dominated by senior male academics may unconsciously favor male applicants.

b) Reviewers may equate assertive writing styles with competence, unintentionally disadvantaging women.

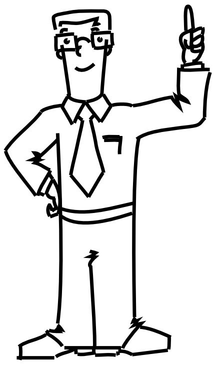
Best Practices:

a) Ensure diversity in review panels (gender, discipline, geographic region, career stage).

b) Provide mandatory training on unconscious bias and inclusive evaluation.

c) Include reviewers with gender expertise to flag biases in proposals or assessments.

4. **Review Stage:** The way proposals are scored and discussed can reinforce or disrupt bias. Without clear criteria and checks, reviewers may penalize applicants based on gendered assumptions.



Examples:

a) A male applicant with average credentials may be rated more favorably than a female with equal or stronger experience.

b) Reviewers may assume that a female co-author was not the lead on a previous project.

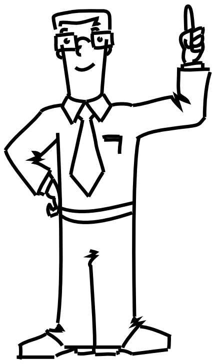
Best Practices:

a) Implement blind review processes where possible to reduce gender bias.

b) Use standardized, transparent scoring rubrics that include GESI (Gender Equality and Social Inclusion) criteria.

c) Encourage panels to spend equal time on each proposal and to document discussions and scoring justifications.

5. **Funding Outcome:** The final stage of the process should uphold gender equity in decisions and feedback mechanisms.



Examples:

a) Funding decisions may favor applicants from elite institutions or those with previous funding, excluding equally capable newcomers.

b) Women and marginalized applicants may not receive feedback that helps them improve for future calls.

Best Practices:

a) Apply an intersectional lens to funding decisions to ensure representation across gender, geography, disability, and institutional background.

b) Create feedback loops where all applicants receive constructive responses.

c) Track and publish funding outcomes disaggregated by gender, institution type, and applicant category to promote transparency.

Cross-Cutting Strategies for Promoting Gender Equity in Funding

1. **Diverse Reviewer Teams:** Include early-career, female, and disabled reviewers to diversify perspectives and check dominant narratives.
2. **Bias Checks in Review Guidelines:** Insert reminders in review forms for panelists to examine their own assumptions and ensure fair assessments.
3. **Inclusive Monitoring and Evaluation:** Integrate gender and inclusion indicators in grant evaluations. For example, how many female-led projects were funded? Did funded projects include gender analysis?
4. **Special Calls or Quotas:** Consider special funding schemes for women-led research, disadvantaged institutions, or cross-sector partnerships that promote GESI.

A West African Research and Innovation Council noticed that less than 10% of its grant recipients were women. To address this, they:

EXAMPLE In Practice

a) Introduced gender targets in new funding cycles.

b) Trained all reviewers on unconscious bias.

c) Added "gender responsiveness" as a scoring criterion.

d) Launched a mentorship program to support female applicants.

Within two years, the number of women-led funded projects increased to 35%, showing the impact of deliberate action.

Achieving gender equity in funding and peer review requires intentional design, inclusive implementation, and strong accountability. Councils must view each stage of the funding cycle as an opportunity to level the playing field, ensuring that all researchers, regardless of gender or background, have a fair chance to contribute to science, innovation, and development.

Multiple Choice: A gender-responsive funding call:

a) Is only open to women

b) Ensures both men and women have equal access

c) Prioritizes economic goals only

d) Avoids gender considerations

True/False: Gender equity focuses on fairness based on specific needs and circumstances.
Short Answer: Give one example of a GESI criterion in funding assessment.

Discussion Question

What practical measures could your council take to make funding calls more accessible to women and marginalized groups?

Group Assignment:
Each group will draft a gender-sensitive funding call, incorporating inclusive language, equitable eligibility criteria, and diversity in the evaluation process.

Facilitators Notes

a) Present examples of biased vs. inclusive calls.

b) Facilitate review of a sample funding call with a gender lens.

c) Stress fairness, transparency, and inclusivity in selection.

Suggestions for Further Reading

a) European Commission (2018). Gendered Innovations 2: How Inclusive Analysis Contributes to Research and Innovation.

b) Nature Editorial (2020). Bias in Peer Review Must Be Tackled.

Unit 4.4: Institutionalizing Gender Mainstreaming

Session Duration: 2 hours

Format: Strategy lab session, internal audit exercises, action planning

Institutionalizing gender mainstreaming means embedding gender equality and social inclusion (GESI) into the core systems, culture, and operational frameworks of a Council, not as isolated activities or short-term projects, but as a consistent way of working. This requires deliberate actions across multiple levels: leadership, policy, staff competence, budgeting, monitoring, and institutional structures. Below are key pillars of institutionalization, with detailed explanations and practical examples:

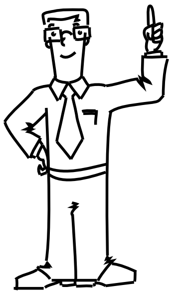
1. **Creating Accountability Mechanisms:** Accountability ensures that gender equality is not left to chance or individual initiative. It requires clear mandates, leadership commitment, and performance expectations related to GESI.

Practical Steps:

a) Assign GESI responsibilities in job descriptions, performance appraisals, and reporting systems.

b) Ensure that the Board and Executive Management have specific oversight functions for gender.

Hold departments and team leads accountable for implementing gender objectives in their programs.



Example:

A Council introduces a gender equity scorecard to evaluate the performance of department heads. Individuals with high scores receive public recognition and are eligible for leadership training.

2. **Developing a Gender Mainstreaming Strategy or Plan:** A Gender Mainstreaming Strategy serves as a roadmap for integrating gender across all Council functions. It aligns with broader institutional goals while specifying GESI objectives, actions, timelines, and responsibilities.

Core Elements:

a) Gender analysis of Council systems and programs.

b) Strategic objectives with gender outcomes.

c) Actionable interventions (e.g., inclusive recruitment, equitable funding policies).

d) Indicators for measuring progress.

Example:

A Council's 3-year strategy includes commitments to increase female leadership by 30%, train 100% of staff on unconscious bias, and apply gender budgeting tools in 70% of its funding cycles.

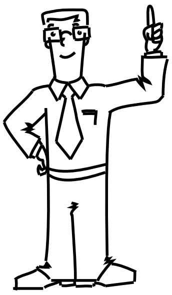
3. **Allocating Dedicated Resources for GESI:** Gender mainstreaming cannot happen without adequate financial and human resources. Councils need to allocate budgets, time, tools, and personnel specifically for gender work.

Action Points:

a) Designate a GESI focal person or unit with authority and resources.

b) Include GESI budget lines in annual financial planning.

c) Fund gender training, audits, and research.



Example:

A Council sets aside 5% of its annual program budget for gender capacity building, institutional assessments, and support for female-led research consortia.

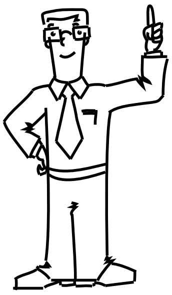
4. **Strengthening Staff Competence and Capacity:** Mainstreaming gender requires that staff at all levels of administration, finance, programs, and HR understand gender concepts and apply them in their roles. This must go beyond one-off training.

Key Interventions:

a) Regular staff training and refresher sessions on gender analysis, inclusive communication, and feminist leadership.

b) Establishing internal gender champions or Communities of Practice (CoP) to support ongoing learning.

c) Inclusion of gender capacity as a criterion in hiring and promotion.



Example:

The HR department of a Council integrates gender sensitivity and inclusive behavior as key components of its staff development framework and performance reviews.

5. **Embedding GESI in Project and Program Cycles:** Programs are the operational arm of Councils. GESI must be considered at every stage of program development, from design to implementation and evaluation**.**

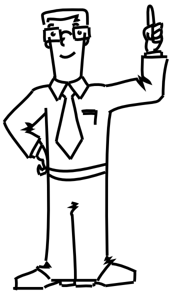
Implementation Practices:

a) Conduct gender analysis before project approval.

b) Set gender-specific goals and indicators in all projects.

c) Require that all projects report on gender-disaggregated outcomes.

d) Apply feminist research principles where relevant.



Example:

Before approving any project, a Council requires a gender checklist be completed to ensure women's voices were considered in needs assessments and design.

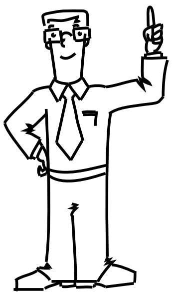
6. **1.Establishing a Gender Information Management System (GIMS):** Data is vital for decision-making and accountability. Councils must collect, analyze, and use gender-disaggregated data to track progress and improve impact.

Components of GIMS:

a) Sex-disaggregated data collection tools.

b) Analysis templates to identify gender gaps.

c) Dashboards to visualize progress against gender indicators.



Example:

The Research Grants Monitoring Unit of a Council produces quarterly GESI data reports that inform Board discussions and funding priorities.

7. **Integrating Gender in Monitoring, Evaluation, Accountability, and Learning (MEAL) Systems:**
Institutionalization demands that gender equality is not only a goal but also a measured result. Monitoring and evaluation systems must track gender-related outcomes and use that data to refine strategies.

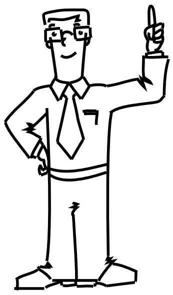
MEAL Integration Practices:

a) Include a GESI expert on the MEAL team.

b) Collect feedback from women, youth, and excluded groups.

c) Disaggregate all outcome data by sex, age, disability, and geography.

d) Prepare reporting templates that highlight inclusion and equity.



Example:

A Council's end-of-year program review report includes a dedicated section on GESI performance, including lessons learned and areas for improvement.

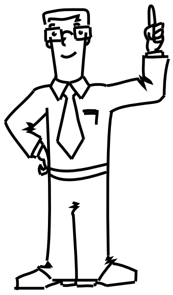
8. **Sustaining Institutional Culture Change:** True institutionalization goes beyond policies and systems; it involves shifting the organizational culture to value and normalize gender equality.

   Culture Change Actions:

   a) Promote inclusive language and respectful workplace behavior.

   b) Celebrate diversity in leadership and recognize GESI champions.

   c) Publicly commit to gender equality in all communication.



Example:

The Council celebrates International Women's Day by showcasing the achievements of its female grantees and staff, reinforcing its commitment to inclusion.

Institutionalizing gender mainstreaming is not a one-off activity but a continuous process of transformation. It requires leadership commitment, dedicated resources, staff engagement, and accountability mechanisms. Councils that successfully embed GESI principles into their operations not only uphold social justice but also strengthen the relevance, quality, and impact of their research and innovation initiatives.

QUIZ TIME

Short QUIZ: Test Your Understanding

Multiple Choice: Which policy helps ensure gender is considered in all council activities?

a) Gender mainstreaming policy

b) Procurement policy

c) Budget approval policy

d) Technical review policy

True/False: Gender mainstreaming should be applied at all stages of the project cycle.

Short Answer: Name one benefit of institutionalizing gender mainstreaming.

Discussion Question

What institutional reforms are most urgent to ensure gender equality in your council's internal processes?

Group Task:

Participants draft an institutional GESI Strategy Outline with 3-year targets.

Facilitators Notes

a) Use the Gender Mainstreaming Scorecard as a self-assessment tool.

b) Facilitate participants in drafting one internal reform action.

c) Stress embedding gender in policies, not just projects.

Suggestions for Further Reading

a) UNDP (2016). Gender Equality Strategy 2018–2021.

b) EIGE (2016). Gender Mainstreaming Toolkit.

Unit 4.5: Addressing Challenges and Sustaining Gender Mainstreaming

Session Duration: 1.5 hours

Format: Lecture, sustainability planning, institutional readiness assessment

Mainstreaming gender and social inclusion within Research and Innovation Councils is often met with real-world challenges. These barriers can range from institutional resistance to limited capacity, lack of political will, and insufficient resources. Sustaining progress requires a combination of strategic planning, leadership, and culture change initiatives that embed GESI (Gender Equality and Social Inclusion) in the DNA of Council operations. Below are common challenges and sustainability strategies for effective gender mainstreaming:

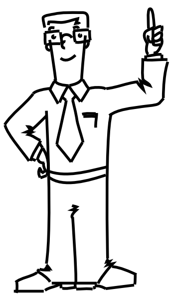
1. **Lack of Political Will or Leadership Commitment:** Without visible and consistent support from top leadership, Board members, Directors, and senior managers, gender mainstreaming remains a side agenda or "optional" task. Leaders may perceive gender as a soft issue rather than a driver of institutional performance and innovation.

Sustainability Strategy:

a) Identify and cultivate gender champions at the leadership level.

b) Provide evidence-based advocacy showing how gender equity enhances research quality and development impact.

c) Include GESI in strategic planning, institutional risk frameworks, and annual performance reviews.



Example:
A Council Chair mandates that gender outcomes be included in quarterly Board reports, elevating GESI to a strategic priority.

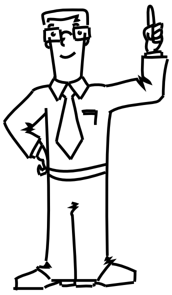
2. **Limited Staff Capacity and Understanding of Gender Issues:** Council staff may lack the skills, knowledge, or confidence to apply gender analysis, design inclusive projects, or evaluate gender outcomes. This leads to poor integration of gender in calls, peer review, and monitoring systems.

Sustainability Strategy:

a) Develop a long-term capacity building plan, including induction training, refresher sessions, and mentorship.

b) Establish a Gender Community of Practice (CoP) where staff can share experiences and seek support.

c) Create job aids and practical tools (e.g., checklists, guidelines) to simplify GESI integration into daily tasks.



Example:
A Council builds an internal GESI Help Desk that provides staff with real-time technical support for integrating gender in funding applications and project evaluations.

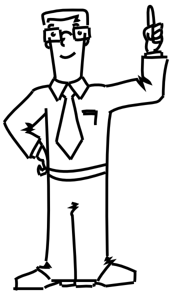
3. **Institutional Resistance to Change:** Some staff or departments may perceive gender mainstreaming as threatening, irrelevant, or burdensome. Resistance may also be rooted in patriarchal norms, lack of incentives, or fear of losing power.

Sustainability Strategy:

a) Engage resistant teams through dialogue, participatory policy development, and tailored sensitization.

b) Use “quick wins” and pilot initiatives to demonstrate the practical value of GESI (e.g., inclusive calls that generate more diverse research outputs).

c) Recognize and reward departments or staff members who lead on inclusive practices.



Example:
A Council recognizes departments that achieve GESI targets with annual awards and public acknowledgment, creating a healthy competition and boosting morale.

4. **Resource Constraints:** Gender work is often underfunded, viewed as a “non-core” area. Councils may not allocate enough financial, human, or time resources to sustain mainstreaming efforts.

Sustainability Strategy:

a) Institutionalize gender budgeting practices to ensure GESI has a dedicated share of the operational budget.

b) Leverage donor partnerships or cross-sector collaborations to support gender-focused initiatives.

c) Embed GESI within existing systems (e.g., integrate gender into M&E frameworks rather than creating parallel ones).

Example:

A Council includes a mandatory GESI budget line in all funded research projects and ensures the same in its internal budget planning cycle.

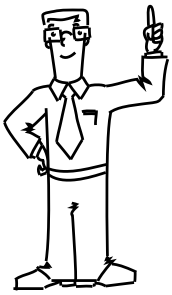
5. **Data Gaps and Poor Monitoring Systems:** Councils may lack sex-disaggregated data or tools to monitor gender outcomes. Without data, it's hard to measure progress, identify gaps, or hold teams accountable.

Sustainability Strategy:

a) Establish a Gender Information Management System (GIMS) to collect and track gender-disaggregated data.

b) Integrate GESI indicators in existing MEAL (Monitoring, Evaluation, Accountability, and Learning) systems.

c) Build capacity among M&E teams to analyze gendered data and apply intersectional lenses.



Example:

A Council updates its grant application form to collect applicant data by sex, age, disability, and institution type, enabling better monitoring of inclusion outcomes.

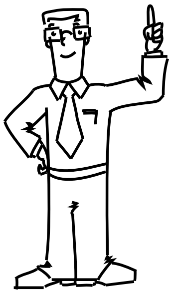
6. **Lack of Continuity Due to Staff Turnover or Structural Changes:** When GESI champions leave or institutional restructuring occurs, momentum for gender mainstreaming can be lost if systems are not well established.

Sustainability Strategy:

a) Institutionalize GESI roles, plans, and policies so that they outlive individual staff.

b) Ensure handover notes and succession plans include GESI responsibilities.

c) Embed GESI goals into Council strategic frameworks, ensuring long-term continuity.



Example:
A Council creates a Gender and Inclusion Task Team made up of representatives from all departments to ensure continuity of gender goals across staffing changes.

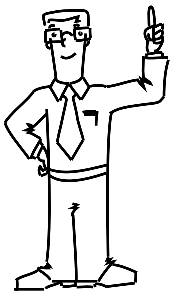
7. **Tokenism and Checklist Mentality:** Sometimes, gender integration becomes a "tick-box exercise", adding women to panels or mentioning gender in reports without real impact or change.

Sustainability Strategy:

a) Shift focus from representation to meaningful participation and influence.

b) Monitor not just activities (e.g., number of women trained) but also outcomes (e.g., percentage of women in decision-making roles).

c) Promote transformative leadership that addresses underlying power imbalances.



Example:
A Council trains reviewers not only to check if proposals mention women, but also to evaluate how well the project addresses gendered needs and structural barriers.

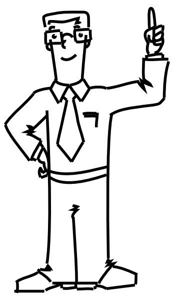
8. **Sustaining Progress Through Institutional Culture Change:** Sustained gender mainstreaming requires more than systems; it demands a change in mindset, values, and norms that influence daily behaviors and attitudes.

Sustainability Strategy:

a) Promote a Council-wide culture of respect, diversity, and inclusion through regular communication, storytelling, and campaigns.

b) Encourage all staff to see gender equality as everyone's responsibility, not just the GESI unit's role.

c) Celebrate milestones and share success stories to motivate others.



Example:
A Council's communications team launches a monthly 'Inclusion Spotlight' featuring stories of staff or researchers breaking gender barriers or promoting inclusion.

Case Studies for Discussion

a) Sierra Leone: The Directorate of Science, Technology, and Innovation (DSTI) launched a “Girls in ICT” mentorship program that directly influenced how research grants prioritized gender equity in STEM education.
b) Ghana: The Science and Technology Policy Research Institute (STEPRI) integrated gender-responsive budgeting into its funding calls, ensuring more women researchers accessed grants.

Addressing challenges to gender mainstreaming is not about avoiding problems. It is about having systems, strategies, and leadership that are resilient, inclusive, and responsive. By anchoring gender work into institutional structures, budgets, leadership, and culture, Councils can ensure that gender equality becomes a living practice, not just a policy on paper. Sustaining this progress means constantly learning, adapting, and reinforcing equity as a shared goal and standard for excellence.

Multiple Choice: Which is NOT a common barrier to GESI?

a) Lack of awareness

b) Strong leadership support

c) Cultural resistance

d) Limited resources

True/False: Sustaining GESI requires continuous training and monitoring.

Short Answer: Give one way to address cultural resistance to gender inclusion.

Discussion Question

What strategies could help sustain gender mainstreaming efforts even when leadership changes or political will declines?

Final Activity

Each Group is to develop a 5-page Gender Mainstreaming Action Plan that addresses:

1. Internal gaps (structure, staff, results)
2. Strategic priorities and interventions
3. Monitoring and learning system
4. Capacity-building roadmap

Ensuring equity and inclusion in research requires a strong ethical foundation. The principles and practices covered in Module 4 are deeply connected to ethical research conduct, as both seek to ensure fairness, respect, and responsibility. Module 5 deepens this conversation by providing a structured framework for ethical decision-making, compliance with regulations, and the promotion of research integrity. The ethical standards introduced here safeguard the credibility of research outputs, protect participant rights, and maintain public trust, all of which are essential for sustaining inclusive, impactful research and innovation systems.

Facilitators Notes

a) Encourage reflection on cultural and institutional barriers.

b) Discuss strategies for maintaining momentum.

c) Showcase long-term African examples (e.g., AWARD program).

Suggestions for Further Reading

a) UNESCO (2017). Cracking the Code: Girls' and Women's Education in STEM.

b) AWARD (2019). Gender Mainstreaming in African Agricultural Research Institutions.

MODULE FIVE:
RESEARCH ETHICS AND INTEGRITY

Ensuring ethical conduct and integrity in research is fundamental to building public trust, safeguarding participants, and upholding the credibility of scientific outcomes. In the context of West African Research and Innovation Funding Councils, integrating ethical standards into funding calls, proposal evaluations, and project oversight is critical for maintaining accountability and international compliance. Module 5 introduces participants to the core principles of research ethics, including respect for persons, beneficence, and justice, as well as key issues such as informed consent, data protection, and conflict of interest. It also examines the structure and function of Research Ethics Committees (RECs) and provides guidance on ethical review processes, risk mitigation, and institutional responsibilities. By strengthening ethical governance, this module enables councils to support responsible research that not only advances knowledge but also protects human dignity and promotes the greater good of society.

Module Overview

Category	Summary
Objectives	Understand ethical principles in research funding and oversight. Apply ethics review processes effectively. Identify and mitigate ethical risks. Institutionalize integrity systems.
Duration	Approx. 7.5 hours total (5 units @ 1.5 hours each)
Key Topics	- Guiding ethical principles. - Ethics review processes and structures.- Key ethical risks.- Promoting research integrity.- Institutional oversight mechanisms.
Target Participants	Ethics committee members, council executives, grants officers, MEL, and compliance staff.
Expected Outcomes	- Councils integrate ethical oversight into funding processes. - Improved compliance with national and international standards.- Ethical risks identified and mitigated.- Institutional ethics frameworks established.

Training Objectives: By the end of this module, participants will be able to:

1.	Understand the fundamental concepts and key principles of research ethics and integrity.
2.	Identify ethical considerations and risks in research involving human participants, animals, and the environment.
3.	Apply ethical review processes and regulatory requirements to research protocol development and approval.
4.	Promote institutional and personal research integrity through adherence to professional standards and codes of conduct.
5.	Recognize and mitigate ethical misconduct, including fabrication, falsification, plagiarism, and conflict of interest.

Training Outcomes: The expected training Outcomes of this Module Include:

1.	Participants demonstrate understanding of core ethical principles in research and their application in funding decisions.
2.	Councils establish or strengthen ethical review structures and standard operating procedures (SOPs).
3.	Participants identify and mitigate key ethical risks, including conflicts of interest, data misuse, and informed consent violations.
4.	Institutions promote research integrity by embedding ethics training, compliance monitoring, and institutional accountability systems.

Facilitation Methods and Procedures

1. Session Flow

a. **Opening (5 mins):** Stress the link between ethics and research credibility**.**

b. **Presentation (30 mins):** Cover the seven guiding ethical principles, ethics review processes, and REC structures.

c. **Case Analysis (20 mins):** Review a misconduct case and its consequences.

d. **Simulation Exercise (30 mins):** Role-play an ethics review committee meeting.

e. **Wrap-Up (10 mins):** Share reflections and recommended resources.

2. Key Discussion Points

a. Ethical principles in research.

b. Role and functions of RECs.

c. Handling ethical breaches.

3. Activities & Exercises

a. **Ethics Dilemma Debate:** Teams argue different sides of an ethical case.

b. **Ethics Checklist Development:** Participants create a checklist for proposal review.

4. Facilitation Tips

a. Encourage open discussion without judgment.

b. Use real-life cases for stronger impact.

5. Potential Challenges & Solutions

a. **Challenge:** Discomfort discussing misconduct.

b. **Solution:** Keep focus on learning, not blaming

Training Content

Below are the study units under this module:

Unit 5.1: Understanding Research Ethics and Integrity

Unit 5.2 Ethics Review Process and REC Structures

Unit 5.3: Key Ethical Risks and Responsibilities in Research

Unit 5.4: Promoting Research Integrity

Unit 5.5: Institutionalizing Ethics and Oversight Mechanisms

Unit 5.1: Understanding Research Ethics and Integrity

Session Duration: 2 hours

Format: Lecture, group risk identification exercise

Research ethics refers to the principles and standards that govern responsible conduct in the design, implementation, and dissemination of research. It encompasses respect for human and animal subjects, privacy, data protection, and broader social and environmental responsibilities. Research integrity, on the other hand, is about conducting research honestly, accurately, and transparently in a way that allows others to trust the methods, data, and findings.

Group Task:
In groups, identify real or hypothetical ethical issues faced by your research council. Classify these into themes, such as human subjects, data privacy, authorship, conflict of interest, etc.

Ethical Principles Guiding Research

Some guiding Ethical Principles form the foundation for conducting research that is respectful, responsible, and aligned with global standards of human dignity and scientific integrity. These principles ensure that research involving human participants and other sensitive subjects is designed and implemented in a way that protects rights, promotes fairness, and maximizes societal benefit. Each principle addresses a key dimension of ethical practice, ranging from the social value of research to informed consent and participant respect. Together, they provide a framework for evaluating the ethical acceptability of any research project and guide institutions, researchers, and review bodies in making sound, ethical decisions throughout the research lifecycle. Below are the principles guiding ethical research conducts:

1. **Social and Clinical Value:** The foundation of ethical research is that it must have value, not just for the researcher or funding institution, but for society as a whole. Social and clinical value refers to the potential of a research study to generate knowledge that contributes to health, development, policy, or innovation outcomes. This is especially critical in low-resource settings where public funds are limited and research must be geared toward pressing social needs.

2. **Scientific Validity:** Ethical research must be scientifically sound. This means it must use valid research methods, reliable tools, and an appropriate study design that can reasonably answer the research question. Invalid research not only wastes time and resources, but also unnecessarily exposes participants to risks without the prospect of generating useful knowledge. In West Africa, where capacity and infrastructure may be limited, councils must pay particular attention to ensuring that studies are methodologically robust and feasible.

3. **Fair Subject Selection:** Fairness in subject selection requires that participants are chosen based on the scientific goals of the research, and not on convenience, vulnerability, or manipulability. This principle discourages the targeting of easily accessible but vulnerable populations (e.g., low-income groups, children, prisoners) unless their inclusion is scientifically justified. It also prohibits unjustified exclusion of groups (e.g., women, elderly, persons with disabilities) from participating in research that may benefit them.

4. **Favourable Risk-Benefit Ratio:** All research entails some level of risk, whether physical, psychological, social, or economic. This principle requires that risks be minimized as much as possible and are justified by the anticipated benefits of the research. Ethical research weighs potential harm against the knowledge or improvements it may generate and takes active steps to reduce the burden on participants.

5. **Independent Review:** An independent ethical review is a safeguard against bias, poor judgment, and potential exploitation. It ensures that research proposals are scrutinized by qualified, impartial reviewers who have no vested interest in the study. The presence of Research Ethics Committees (RECs), with diverse membership (including community representatives, legal experts, and subject specialists), guarantees that multiple perspectives are considered before a study begins.

6. **Informed Consent:** Informed consent is the process by which potential participants voluntarily agree to participate in a study after fully understanding its purpose, risks, benefits, and their rights. It is not just a signed form, it is an ongoing dialogue between the researcher and the participant. True informed consent requires that the information be presented in a language and format that is understandable to the participant. In West Africa, this might involve translating materials into local languages, using visual aids for low-literacy populations, or allowing participants time to consult with family or community leaders.

7. **Respect for Potential and Enrolled Participants:** Respect must be shown to participants from the first point of contact through to the conclusion of the study and beyond. This includes safeguarding their privacy, protecting their data, ensuring anonymity where promised, and informing them of their rights, including the right to withdraw without consequence.

These Seven Guiding Ethical Principles are practical tools for safeguarding the dignity, rights, and well-being of research participants while ensuring that research outcomes are credible, impactful, and socially responsible. For West African research funding councils, upholding these principles strengthens the research ecosystem, builds public trust, and ensures that science serves the collective good.

Multiple Choice: Which principle focuses on maximizing benefits while minimizing harm?

a) Justice

b) Beneficence

c) Integrity

d) Confidentiality

True/False: Respect for persons includes protecting vulnerable groups.

Short Answer: Name one way to ensure confidentiality in research.

Discussion Question

Why should councils hold researchers accountable for ethical practices, and what mechanisms can ensure compliance?

Group Task:

Role-play a scenario where one partner is the ethics reviewer, another the principal investigator, and others are stakeholders. Practice evaluating a proposed study using the seven ethical principles.

Facilitators Notes

a) Start with real-life ethical dilemmas for discussion.

b) Stress principles: autonomy, beneficence, justice.

c) Link ethics to public trust and credibility

Suggestions for Further Reading

a) Resnik, D. (2015). What is Ethics in Research & Why is it Important? NIH.

b) Steneck, N. (2007). ORI Introduction to the Responsible Conduct of Research.

Unit 5.2: Ethics Review Process and REC Structures

Session Duration: 1.5 hours

Format: Case analysis, checklist development workshop

Before any research involving human participants, animals, or sensitive data can begin, it must undergo a formal ethical review to ensure that it meets established ethical standards and safeguards the rights and well-being of all involved. This review process is carried out by Research Ethics Committees (RECs). RECs are independent bodies composed of experts and community representatives who assess the ethical acceptability of research protocols. In this unit, participants will explore the ethics review process, including the various types of reviews available and the decision pathways a research application may follow. Understanding the structure and function of RECs is crucial for research councils and institutions to ensure compliance, build public trust, and promote responsible science.

The Ethics Approval Process

All research involving human subjects, animals, or potentially hazardous materials must undergo ethical review before commencement. Ethical approval is not a bureaucratic burden; it is a safeguard. Ethical approval is a formal process by which research proposals are assessed for compliance with ethical standards before any data collection or participant engagement begins. The process is essential for ensuring that research is conducted with respect for human dignity, transparency, and professional responsibility.

a. **Obtain ethical approval:** Ensure that planned research meets ethical standards and obtain necessary approvals. Before initiating any study involving human participants, personal data, animals, or the environment, researchers must submit their research protocol to a recognized Research Ethics Committee (REC). This committee evaluates whether the study meets ethical and legal standards. The protocol typically includes details about the study design, recruitment methods, informed consent procedures, data handling, and risk mitigation. Without this approval, the study is not permitted to proceed. For councils, enforcing this step ensures that publicly funded or institutionally affiliated research does not compromise participants' rights or institutional reputation.

b. **Adhere to ethical guidelines: Staff and students must follow the terms of any given ethical approval:** Once ethical approval is granted, researchers are obligated to conduct the study exactly as described in their approved protocol. This includes following the agreed consent procedures, using the stated methodology, and recruiting only eligible participants. Any deviation from the approved plan must be reported to the REC and, if necessary, a request for protocol amendment must be submitted. Adherence to these guidelines ensures that participants are not exposed to unforeseen risks and that the study remains credible. Non-compliance can lead to withdrawal of approval or institutional penalties.

- **c** **Protect participants: Obtain informed consent, safeguard data, and address participant safety concerns:** This is the core of ethical research. Researchers must prioritize the rights, dignity, and welfare of all participants. Informed consent must be voluntarily given after the participant fully understands the study's purpose, risks, benefits, and their right to withdraw without penalty. Additionally, data collected from participants must be protected through secure storage, encryption, and anonymization where appropriate. Researchers must also monitor for any adverse effects,physical, psychological, or social,and respond appropriately. Funding councils and institutions should ensure that mechanisms are in place to support participant protection, especially in high-risk studies.

- **d** **Prevent legal issues:** Failure to comply with ethical guidelines can lead to harm to participants and potential litigation: Conducting research without ethical approval or failing to adhere to approved guidelines,can have serious legal and reputational consequences. Participants may suffer harm, and institutions may face lawsuits, funding withdrawal, or public backlash. Ethical lapses can also result in retraction of published studies, loss of academic credibility, or blacklisting by international collaborators. Councils have a responsibility to educate researchers about these risks and to implement strong compliance mechanisms that discourage unethical behavior and ensure accountability.

- **e** **Retrospective approval of research protocols should not be given:** Retrospective approval refers to approving a study after data collection has already begun or been completed. This practice is universally discouraged and considered unethical because it bypasses the entire purpose of the review process,to evaluate and mitigate risks before they occur. Data collected without prior ethical approval is considered compromised and cannot ethically be used for analysis, publication, or policy development. Councils and RECs must be firm on this rule and ensure that researchers understand that any research involving human subjects, personal data, or ethical concerns must receive approval in advance, not after the fact.

These ethical approval requirements form the backbone of responsible research governance. By following each step, researchers demonstrate respect for participants, uphold institutional standards, and contribute to a trustworthy research environment. For West African Research and Innovation Funding Councils, implementing and enforcing this process helps to elevate national and regional research credibility, fosters international collaboration, and safeguards the public interest.

Types of Reviews:

- Regular Review: Standard REC meeting evaluation.
- Fast Track Review: Used in urgent or time-sensitive cases.
- Expedited Review: Applied for low-risk studies.

Possible REC Decisions:

a) Approved as submitted

b) Approved with conditions

c) Request for amendments

d) Returned for resubmission

e) Rejected

Short QUIZ: Test Your Understanding

Multiple Choice: An ethics review ensures:

a) The research is profitable

b) The research meets ethical standards

c) The research has no budget limit

d) The research avoids innovation

True/False: REC stands for Research Ethics Committee.

Short Answer: Give one role of an REC.

Discussion Question

What challenges do ethics committees face in your country, and how can councils strengthen their role?

Group Task:
Develop a mock research protocol and simulate the ethics review process, including application submission, committee deliberation, and decision outcome.

Facilitators Notes

a) Walk through REC structures (chair, secretariat, reviewers).

b) Facilitate a mock ethics review of a proposal.

c) Stress consistency and transparency in decision-making.

Suggestions for Further Reading

a) CIOMS (2016). International Ethical Guidelines for Health-related Research Involving Humans.

b) WHO (2011). Standards and Operational Guidance for Ethics Review of Health-related Research.

Unit 5.3: Key Ethical Risks and Responsibilities in Research

Session Duration: 1.5 hours

Format: Scenario-based group work, ethical dilemma discussions

This unit addresses the ethical obligations of researchers and institutions throughout the research lifecycle. It highlights risks and how they should be ethically managed, especially in contexts involving vulnerable populations, sensitive data, and complex social dynamics. The following are key ethical risks and responsibilities in research:

a. **Informed Consent and Confidentiality:** Informed consent is more than just a signed document; it is an ethical process of mutual understanding. Participants must be provided with all relevant information about the research, its purpose, procedures, potential risks and benefits, and their right to withdraw at any time, before agreeing to participate. In West Africa, this often requires translating into local languages, considering cultural norms, and engaging community gatekeepers to ensure legitimacy without compromising individual autonomy.

b. **Research Involving Vulnerable Populations:** Vulnerable populations such as children, refugees, persons with disabilities, pregnant women, or low-literacy groups require heightened ethical protections. These groups may be more susceptible to coercion or exploitation and might not fully understand the implications of their participation. Ethical research requires that their inclusion be justified scientifically and ethically. Measures such as obtaining assent from children and consent from guardians, using visual or audio aids, and involving community advocates are essential. Researchers must also ensure that risks are minimal and benefits are meaningful for these populations.

c. **Research Involving Animals and the Environment:** Ethical research extends to non-human subjects and the natural environment. For research involving animals, the internationally recognized principles of Replacement, Reduction, and Refinement (3Rs) must be applied. This means using alternatives to animal testing where possible, minimizing the number of animals used, and reducing their pain or distress. Environmental research must consider potential ecological harm, especially when working with genetically modified organisms (GMOs), hazardous chemicals, or wildlife. Ethical review must ensure that biosafety protocols are followed, and environmental impact assessments are conducted where necessary.

d. **Conflict of Interest:** A conflict of interest arises when personal, financial, or institutional interests may compromise or appear to compromise the objectivity of a researcher or research decision. These conflicts must be disclosed upfront to ethics committees and managed appropriately. Examples include researchers holding shares in a company sponsoring the study, or reviewers approving proposals submitted by colleagues or relatives. Even the perception of bias can erode public trust. Transparency, documented declarations, and independent oversight are essential safeguards.

TEST YOUR UNDERSTANDING

Multiple Choice: Which is an example of an ethical risk?

a) Informed consent

b) Plagiarism

c) Data security

d) All of the above

True/False: Plagiarism is an acceptable practice in collaborative research.

Short Answer: Name one way to mitigate ethical risks.

Discussion Question

What ethical risks are most pressing in research funded by your council (e.g., data misuse, participant safety, conflicts of interest), and how should they be addressed?

Group Task:
Each group creates a checklist of what should be included in an informed consent form and what steps institutions should take to manage conflicts of interest.

Facilitators Notes

a) Use case scenarios (data misuse, vulnerable groups).

b) Encourage risk identification and mitigation planning.

c) Stress reporting mechanisms for breaches.

Suggestions for Further Reading

a) Emanuel, E. (2000). “What Makes Clinical Research Ethical?” JAMA.

b) Shamoo, A., & Resnik, D. (2015). Responsible Conduct of Research.

Unit 5.4: Promoting Research Integrity

Session Duration: 1 hour

Format: Interactive discussion, institutional gap identification

While ethics focuses on how research affects others, integrity focuses on how researchers conduct themselves and their work. This unit promotes a culture of honesty, transparency, and professionalism in research institutions. The following principles help to ensure research integrity:

a. **Honesty in Data Collection, Reporting, and Authorship:** Research must be truthful from start to finish. This includes how data is gathered, analyzed, interpreted, and presented. Fabricating (making up) or falsifying (altering) data are serious violations that can invalidate entire projects and damage public trust. Plagiarism, using someone else's work without proper acknowledgment, is another breach of integrity. Authorship must reflect real contributions, and all cited works must be properly referenced. Researchers and institutions must also be cautious not to suppress negative results or selectively report only favourable outcomes.

b. **Scrupulous Care and Excellence in Research Practice:** Conducting research with excellence involves choosing appropriate methods, following established protocols, and rigorously analyzing results. Carelessness, such as using uncalibrated equipment or neglecting to test for bias can lead to invalid conclusions, even when no misconduct is intended. Research funding councils must encourage thorough proposal development, peer review, and training in scientific methods. Ethical research is not just about good intentions, it's about precision and professionalism.

c. **Transparency and Open Communication:** Researchers must be open about how their data was collected, whether data is being reused, and what limitations exist in the research. They must also disclose their funding sources and any potential biases that could influence the results. Making findings accessible through publications, data repositories, or community presentations is a part of responsible research. Where possible, even negative results should be shared to support cumulative knowledge and prevent duplication of efforts.

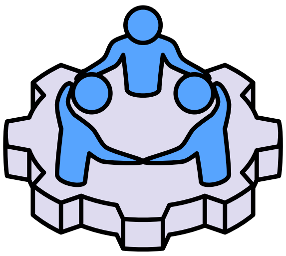
d. **Respect for All Research Participants and Subjects:** Respect in research means safeguarding the dignity and welfare of everyone and everything involved humans, animals, communities, cultures, and the environment. It also includes responsible stewardship of research for future generations. For human subjects, this includes listening to feedback, providing support if harm occurs, and honouring their contribution even after participation ends. Researchers must avoid exploitation and promote fairness, especially in collaborations between high- and low-resource settings.

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Which is NOT a part of promoting integrity?
   a) Transparent reporting
   b) Data fabrication
   c) Conflict of interest disclosure
   d) Peer review
2. **True/False:** Research integrity involves adherence to professional standards.
3. **Short Answer:** Give one method for promoting research integrity in councils.

Discussion Question

How can councils foster a culture of research integrity beyond punitive measures for misconduct?



Group Task:

Analyze sample scenarios of misconduct (e.g., data manipulation, ghost authorship, withheld findings). Discuss whether they are violations and what institutional response is appropriate.

Facilitators Notes

a) Discuss responsible authorship, data management, and peer review.

b) Use Singapore Statement principles for discussion.

c) Encourage participants to draft integrity policies.

Suggestions for Further Reading

a) National Academies (2017). Fostering Integrity in Research.

b) Singapore Statement (2010). Principles of Research Integrity.

Unit 5.5: Institutionalizing Ethics and Oversight Mechanisms

Session Duration: 1.5 hours

Format: Policy drafting, group review, compliance checklist development
To ensure that ethics and integrity are upheld consistently, institutions must embed ethical governance into their structures, policies, and day-to-day operations. This unit explores how councils and research bodies can establish and strengthen oversight mechanisms.

a) **Establishing and Supporting Research Ethics Committees (RECs):** RECs are central to ethical oversight. They review protocols, assess risks, and protect participants' rights. An effective REC must be independent, multi-disciplinary, and free from conflicts of interest. It should include researchers, ethicists, community representatives, and legal advisors. Councils must provide RECs with adequate funding, administrative support, and continuous training. REC processes must also be transparent, standardized, and inclusive, ensuring that all proposals, whether from established institutions or early-career researchers, receive fair evaluation.

b) **Monitoring Compliance and Reviewing Amendments:** Oversight does not end with initial approval. RECs and councils must monitor how approved research is actually conducted. This includes reviewing progress reports, conducting site visits, and responding to complaints or unexpected events. If researchers wish to modify their protocol (e.g., add new participants, change methodology), they must apply for approval of an ethical amendment. This ensures that any changes do not introduce new risks or ethical concerns.

c) **Building Ethics Policies and Institutional Culture:** Institutionalizing ethics also requires written policies on issues like informed consent, data protection, authorship, and international collaboration. These policies must align with national and international standards, be easily accessible, and regularly updated. More importantly, ethical values must become part of institutional culture. This can be achieved through leadership commitment, ethical training programs, mentorship, and creating an environment where ethical concerns can be raised without fear of retaliation.

d) **Capacity Building and Training:** Councils should mandate and fund annual training for researchers, REC members, and administrative staff. Ethics and integrity should also be part of undergraduate and postgraduate curricula. Training should cover emerging issues such as artificial intelligence in research, big data ethics, cross-border research, and indigenous knowledge systems. Building ethical capacity today is essential for sustaining trust in science tomorrow.

Case Studies for Discussion

a) Nigeria: The University of Ibadan Ethics Committee developed Africa's first electronic ethics review platform, improving transparency and reducing approval times for funded projects.
b) Burkina Faso: The National Research Ethics Committee mandated community consultations in all health trials after controversies over vaccine research, highlighting ethical responsibility and inclusivity.

1. **Multiple Choice:** Which measure ensures ongoing ethics compliance?
   a) Regular audits
   b) Ignoring complaints
   c) Allowing unapproved studies
   d) Avoiding oversight committees
2. **True/False:** An ethics policy should outline both researcher and institution responsibilities.

3. **Short Answer:** Name one long-term benefit of institutionalizing research ethics.

Discussion Question

What steps can councils take to institutionalize ethics review processes so they remain consistent, transparent, and sustainable?

Group Task:

Draft a one-page ethics and integrity policy framework for your council. Include roles of RECs, enforcement mechanisms, and training requirements.

Having explored Research Ethics and Integrity in Module Five, participants now recognize the importance of upholding credibility, transparency, and accountability in the research process. Ethical and integrity safeguards not only protect researchers and participants but also strengthen the trustworthiness of evidence generated. Trustworthy evidence, however, is only impactful when it informs real-world decisions. This is where Module Six: Policy Influence & Advocacy comes in. Building on the foundation of credible and ethical research, this module focuses on equipping Councils with the skills to translate evidence into actionable policy, engage stakeholders effectively, and advocate for reforms that drive national and regional development.

Facilitators Notes

a) Facilitate group work on designing oversight mechanisms.

b) Stress embedding ethics in council governance.

c) Link to global best practices and local adaptation.

Suggestions for Further Reading

a) UNESCO (2021). Recommendation on the Ethics of Artificial Intelligence.

b) OECD (2019). Best Practices for Research Integrity.

MODULE SIX:
POLICY INFLUENCE & ADVOCACY

Policy influence and advocacy are critical for ensuring that research and innovation drive tangible development outcomes. In West Africa, Research and Innovation Funding Councils (the "Councils") generate and fund evidence that can inform national policies, yet often struggle to translate findings into actionable reforms. Policymakers are faced with competing priorities, while researchers sometimes lack the skills and networks to frame evidence in policy-relevant ways. This module equips participants with the knowledge, tools, and strategies to bridge this gap. It focuses on evidence translation, policy engagement, advocacy planning, and multi-stakeholder dialogue, with a view to strengthening the role of Councils in shaping national and regional policy agendas.

Module Overview

Category	Summary
Objectives	Understand the dynamics of policy processes in West Africa. Translate research into clear, actionable policy options. Design and implement evidence-informed advocacy strategies. Engage stakeholders effectively for policy uptake. Institutionalize policy engagement functions within Councils.
Duration	Approx. 8 hours total (4 units @ 1.5–2 hours each)
Key Topics	Policy process & windows of opportunity; Evidence translation & policy briefs; Advocacy strategies & campaigns; Stakeholder mapping & engagement; Institutionalizing policy functions.
Target Participants	Council executives, policy liaison officers, communication specialists, grants managers, MEL staff, and researchers.
Expected Outcomes	Participants produce policy briefs aligned with national development priorities. Councils strengthen stakeholder engagement strategies. Evidence from funded projects informs national and regional policies. Councils establish or improve internal advocacy/policy units.

Training Objectives: By the end of this module, participants will be able to:

1.	Understand how policy processes operate in the West African context.
2.	Translate technical research outputs into policy-relevant formats.
3.	Design and implement advocacy strategies tailored to stakeholders.
4.	Build multi-stakeholder coalitions for evidence-informed decision-making.
5.	Institutionalize mechanisms for sustained policy influence.

Training Outcomes: The expected training Outcomes of this Module Include:

1.	Participants draft and present policy briefs using evidence from Council-funded research.
2.	Councils adopt systematic approaches to stakeholder mapping and engagement.
3.	Participants demonstrate practical advocacy tools such as elevator pitches, media engagement, and coalition building.
4.	Councils integrate policy influence into their MEL and funding cycles.

Facilitation Methods and Procedures

1. Session Flow

a. **Opening (10 mins):** Highlight importance of policy influence in ensuring research uptake.

b. **Icebreaker (10 mins):** Ask participants to share one example where research in their institution influenced, or failed to influence, policy.

c. **Core Presentation (40 mins):** Cover policy cycles, evidence translation, and advocacy strategies.

d. **Group Activities (60 mins):** Policy brief writing, stakeholder mapping, campaign simulation.

e. **Wrap-up (10 mins):** Summarize, take questions, assign follow-up task.

2. Key Discussion Points

a. Why policy influence matters for councils.

b. What makes research "policy relevant."

c. How to build and sustain advocacy coalitions.

3. Activities & Exercises

- a. Policy Brief Writing Exercise.
- b. Stakeholder Mapping Grid.
- c. Role-play: Meeting with a Minister of Finance.

4. Facilitation Tips

- a. Use real policy examples from participants' countries.
- b. Encourage participants to share challenges openly.
- c. Keep policy brief, exercises practical and focused.

5. Potential Challenges & Solutions

- a. Challenge: Participants think advocacy = politics.
- b. Solution: Clarify that advocacy is evidence-informed persuasion, not partisan politics.
- c. Challenge: Policymakers ignore research.
- d. Solution: Emphasize timing, framing, and stakeholder engagement.

Training Content

Below are the study units under this module:

Unit 6.1: Understanding the Policy Process and Context

Unit 6.2: Translating Research into Policy-Relevant Products

Unit 6.3: Advocacy Strategies and Stakeholder Engagement

Unit 6.4: Institutionalizing Policy Influence and Advocacy in Councils

Unit 6.1: Understanding the Policy Process and Context

Session Duration: 2 hours

Format: Interactive lecture, role-play (parliamentary hearing), case study review

This unit introduces participants to how policy processes work in West Africa, from formulation to evaluation. It explains the roles of government, civil society, and donors, and highlights when and how research evidence can influence decisions. By the end, participants will understand entry points for Councils to engage policymakers and the barriers that often prevent evidence uptake.

Training Content

1. Overview of Policy Cycles in West Africa

a. **Policy Formulation:** How issues are identified and placed on the government agenda. Councils can influence this by producing evidence-based position papers.

b. **Policy Adoption:** Cabinet, parliament, or ministries formalize policies. Councils may be invited for expert testimony.

c. **Policy Implementation:** Ministries/agencies operationalize policies through programs and budgets. Councils should monitor how their recommendations are applied.

d. **Policy Evaluation:** Councils can provide MEL evidence to feed into reviews of whether policies are achieving their goals.

2. Windows of Opportunity

a. Policymaking is not linear; opportunities appear around **elections, crises, donor negotiations, or new sectoral plans.**

b. Councils should prepare "evidence briefs in waiting" to seize these moments.

3. Key Actors in Policy Processes

a. **Elected officials** (President, parliamentarians).

b. **Bureaucrats** (ministries, agencies, commissions).

c. **Non-state actors** (NGOs, industry, media, civil society).

d. **Donors** (influence policy agendas through conditionalities).

4. Barriers to Evidence Uptake

a. **Mistrust of researchers** (seen as too academic).

b. **Timing mismatch** (research produced after decisions are made).

c. **Political incentives** (leaders may prioritize popular policies over evidence-based ones).

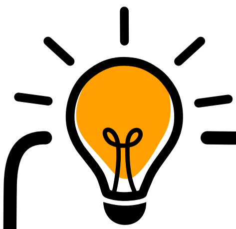
d. **Limited capacity** of policymakers to interpret technical data.

Case Studies for Discussion

Ghana's Council for Scientific and Industrial Research (CSIR) successfully influenced the Plant Breeders Bill by organizing briefing sessions for parliamentarians and simplifying technical evidence into actionable messages.

Case Studies for Discussion

Assign dedicated "policy liaison officers" in Councils to track legislative calendars and alert researchers to upcoming opportunities.



Action Tip:

Councils should assign policy liaison officers to monitor legislative calendars and anticipate entry points for research evidence.

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** Which of the following is NOT part of the policy cycle?
   a) Policy adoption
   b) Policy communication
   c) Policy implementation
   d) Policy evaluation
2. **True/False:** Policy influence only happens at the stage of policy drafting.

Discussion Question

What political or institutional barriers in your country limit the use of research evidence in policymaking?

Facilitators Notes

a) Use Kingdon's model (problem–policy–politics) in role-play.
b) Emphasize identifying policy windows.
c) Share African policy case studies (e.g., Nigeria TETFund reforms).

Suggestions for Further Reading

a) Kingdon, J. (2010). Agendas, Alternatives, and Public Policies.
b) Young, J., & Quinn, L. (2012). Making Research Evidence Matter.

Unit 6.2: Translating Research into Policy-Relevant Products

Session Duration: 2 hours

Format: Tool-based workshop, group drafting exercise

This unit focuses on turning complex research findings into concise, accessible, and actionable messages for policymakers. It introduces tools such as policy briefs, evidence digests, and infographics, and emphasizes the importance of framing research around national priorities. Participants will practice simplifying evidence into formats that busy decision-makers can use.

Training Content

1. **Why Translation Matters:** Research is often too technical for policymakers. Translation ensures research answers the "so what?" question in plain language.

2. **Key Policy Communication Products**

a. Policy Briefs: 2–4 pages summarizing the issue, evidence, and 2–3 recommendations.

b. Policy Memos: Short (1–2 page) internal notes to ministers or committees.

c. Evidence Digests: One-page fact sheets highlighting data trends.

d. Infographics & Dashboards: Use visuals to show progress or risks.

3. **Steps in Developing a Policy Brief**

a. Identify the policy problem (use national or sectoral data).

b. Summarize the research evidence (what is known).

c. Present policy options (e.g., status quo vs. reform vs. new investment).

d. Recommend clear actions (costed, feasible, aligned with SDGs/national plans).

e. End with a call to action.

4. **Framing Evidence for Policymakers**

a. Link research to political priorities (e.g., jobs, food security, health).

b. Use stories and real-life cases alongside data.

c. Present cost-benefit analysis (saves money or generates growth).

Case Study

Nigeria's TETFund produced concise briefs linking higher education research to employability. The Ministry of Education adopted some recommendations into its 2020–2025 strategic plan.

Tool

1. Policy Brief Writing Template (with sections: Title, Executive Summary, Problem Statement, Evidence, Recommendations, Call to Action).
2. Policy Brief Writing Template.

Short QUIZ: Test Your Understanding

1. **Multiple Choice:** A good policy brief should be no longer than:

a) 2 pages

b) 5 pages

c) 15 pages

d) 30 pages

2. **True/False:** Name one visual tool that can make research more policy-relevant.

Discussion Question

How can your council ensure that research evidence is communicated in ways that policymakers will actually read and use?

Facilitators Notes

a) Facilitate drafting of a 1-page policy brief from research findings.

b) Emphasize clarity, brevity, and policy relevance.

c) Stress tailoring outputs to different stakeholders.

Suggestions for Further Reading

a) ODI (2016). How to Write a Policy Brief. Overseas Development Institute.

b) Court, J., & Young, J. (2006). Bridging Research and Policy in International Development.

Unit 6.3: Advocacy Strategies and Stakeholder Engagement

Session Duration: 2 hours

Format: Group mapping, campaign simulation

This unit equips participants with practical advocacy techniques and stakeholder engagement tools. It explores the difference between advocacy and lobbying, shows how to map power and interest among stakeholders, and highlights ways to build effective coalitions. Participants will learn how to design advocacy campaigns that use evidence to persuade and mobilize diverse actors.

Training Content

1. **Defining Advocacy:** Advocacy means using evidence and persuasion to influence decision-makers. It differs from lobbying, which is often characterized as political or transactional.

2. **Types of Advocacy Approaches**

a. Direct Advocacy: Meetings, testimonies, letters to policymakers.

b. Indirect Advocacy: Media campaigns, public forums, social media.

c. Coalition Advocacy: Building alliances (Quadruple Helix model).

3. **Stakeholder Mapping:** Use a power–interest matrix to classify actors: High power / High interest = champions; High power / Low interest = need persuasion; Low power / High interest = allies; Low power / Low interest = monitor only.

4. **Building Effective Advocacy Coalitions**

a. Involve academia, government, industry, and civil society.

b. Agree on common goals and consistent messaging.

c. Develop joint campaigns (policy dialogues, roundtables, op-eds).

5. **Advocacy Tools and Techniques**

a. Elevator pitches (30–60 sec messages for busy officials).

b. Media engagement (press releases, op-eds, radio shows).

c. Social media campaigns (#hashtags to amplify voice).

d. Policy dialogues (roundtables with stakeholders).

Case Study

Senegal's National Research Fund worked with farmer cooperatives and NGOs to advocate for increased budget allocations to agricultural R&D, successfully influencing the Ministry of Finance.

Tool

Stakeholder Mapping Worksheet (list of actors, their interests, influence level, engagement strategy).

Short QUIZ: Test Your Understanding

True/False: Advocacy strategies should be the same for all stakeholders.

Short Answer: Name one non-traditional partner councils can use for advocacy.

Discussion Question

Which stakeholders in your country hold the most power over research policy decisions, and how can your council engage them effectively?

Facilitators Notes

a) Role-play stakeholder negotiation.

b) Map stakeholders by influence and interest.

c) Encourage participants to design advocacy coalitions.

Suggestions for Further Reading

a) Keck, M., & Sikkink, K. (1998). Activists Beyond Borders: Advocacy Networks in International Politics.

b) FAO (2011). Advocacy Toolkit for Development Practitioners and Policymakers.

Unit 6.4: Institutionalizing Policy Influence and Advocacy in Council

Session Duration: 1.5 hours

Format: Lecture, group action planning workshop

This unit emphasizes how Councils can move from ad hoc advocacy to sustained, institutionalized policy engagement. It covers the creation of internal advocacy units, integration of policy work into MEL systems, and partnerships with think tanks and regional platforms. By the end, participants will be able to develop council-level strategies that make policy influence a permanent function rather than a one-off activity.

Training Content

1. Institutional Structures for Advocacy

a. Establish Policy Engagement Units or assign dedicated staff.

b. Develop standard operating procedures (SOPs) for evidence translation.

c. Train staff in policy communication and advocacy.

2. Integrating Policy Engagement into MEL

a. Use monitoring data from funded projects as advocacy evidence.

b. Require grantees to produce policy briefs as part of reporting.

c. Link MEL results to national policy review cycles.

3. Building Partnerships for Policy Engagement

a. Collaborate with think tanks and advocacy NGOs (e.g., CODESRIA, AERC).

b. Engage with regional platforms (ECOWAS, AU, AfDB).

c. Use international networks to amplify research impact.

4. Sustaining Advocacy Functions

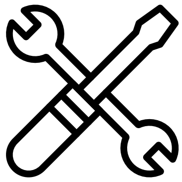
a. Allocate annual budget lines for policy engagement.

b. Develop council-wide advocacy strategies aligned with national priorities.

c. Institutionalize policy dialogues (annual or biannual forums).

Case Study

ECOWAS Science, Technology and Innovation (STI) policy drew directly from council-funded research, because councils had institutionalized regular policy dialogues with ECOWAS bodies.



Tool

Action Planning Worksheet (list of next steps, responsible staff, resources needed, timelines).

Wrap-Up

Each participant drafts a 30-day action plan: E.g., prepare one policy brief, identify three stakeholders, and organize one policy meeting.

Group discussion on practical next steps for councils.

Short QUIZ: Test Your Understanding

Multiple Choice: Which is NOT a way to institutionalize policy advocacy?

a) Creating a dedicated policy unit

b) Developing partnerships with think tanks

c) Waiting for policymakers to request evidence

d) Integrating advocacy into MEL

Discussion Question

What steps can your council take in the next 6 months to institutionalize advocacy functions?

Action Planning and Conclusion (20 minutes)

a) Each participant drafts a 30-day action plan to improve their council's policy influence (e.g., produce one policy brief, map three stakeholders, schedule one policy dialogue).

b) Sharing session: Volunteers present their action points.

Facilitators Notes

a) Guide councils in drafting a policy engagement strategy.

b) Stress the need for evidence repositories and knowledge brokers.

c) Highlight institutional reforms for sustained advocacy.

Suggestions for Further Reading

a) UNESCO (2015). Science Policy and Capacity-Building in Africa.

b) IDRC (2020). Evidence in Action: Policy Engagement Toolkit.

Conclusion

The ATPS-SRIFA Training Manual presents a comprehensive, context-specific, and technically rigorous framework for strengthening Research and Innovation Funding Councils in West Africa. Each module has been designed to address critical institutional and operational gaps by equipping participants with the advanced knowledge, analytical tools, and practical strategies necessary to build sustainable, equitable, and high-impact research ecosystems. From fundraising and grantmanship to the design and management of PPPs, as well as the commercialization of research outputs and the institutionalization of gender equality, research ethics, and integrity standards, this manual emphasizes systems thinking, evidence-based decision-making, and strategic alignment with national and regional development priorities.

The manual moves beyond theoretical knowledge by integrating hands-on tasks, diagnostic tools, and real-world case studies that simulate the complexity of working within dynamic, multi-stakeholder environments. It encourages Councils to adopt a transformative learning approach, one that institutionalizes innovation, promotes accountability, fosters inclusive leadership, and accelerates impact across the science-policy-society interface. The successful implementation of this training content demands continued investment in internal capacity, enabling policy environments, and strategic collaboration across sectors. As councils apply these tools in their operational contexts, they will be better positioned to catalyze transformative research agendas, attract diversified funding, and deliver measurable developmental value across West Africa.

Glossary of Key Terms

Term	Definition
Adaptive Management	A structured, iterative process of decision-making in project or partnership management that uses ongoing monitoring and evaluation data to adjust strategies, improve effectiveness, and respond to emerging challenges or opportunities.
ATPS	African Technology Policy Studies Network: a regional body providing policy research, training, and capacity building to strengthen innovation ecosystems in Africa.
Baseline Assessment	The collection of data and information before a project starts, used as a reference point to measure changes and assess project impact
Bilateral Donor	A government agency or entity that provides financial or technical assistance directly from one country to another (e.g., USAID, GIZ, DFID).
Capacity Building	Activities aimed at strengthening the skills, competencies, and abilities of individuals, institutions, or systems to improve performance and achieve sustainable development outcomes.
Civil Society Organization (CSO)	Non-governmental, non-profit entities that represent the interests of citizens, advocate for rights, and deliver services to communities.
Commercialization Pathway	The route by which research outputs are transformed into marketable products, services, or processes, such as licensing, joint ventures, or spin-offs.
Conflict of Interest	A situation in which personal, institutional, or financial interests could compromise, or appear to compromise, the objectivity and integrity of decision-making.
Directly Allocated Costs	Costs that are shared across multiple projects but can be specifically assigned to a particular project in proportion to the benefit received.
Directly Incurred Costs	Project-specific costs that are clearly and directly attributable to the project, such as personnel salaries, equipment purchases, or travel.

Glossary of Key Terms

Term	Definition
Equity (in Licensing)	Shares or ownership interest given to a licensor in exchange for rights to use intellectual property, often used in start-up or spin-off contexts.
Equity-Based Compensation	A licensing or commercialization arrangement in which the licensor receives ownership interest (shares) in a company instead of, or in addition to, cash payments. This allows the licensor to participate in the company's growth and governance but carries the risk of loss if the company fails.
Field-of-Use Restriction	A contractual provision in a licensing agreement that limits the application of a technology to specific sectors, markets, or purposes.
Gender Equality and Social Inclusion (GESI)	Policies, strategies, and actions aimed at ensuring that both women and marginalized groups have equitable access to opportunities, resources, and decision-making.
Impact Pathways	The planned routes through which research activities are expected to lead to outputs, outcomes, and long-term societal impacts.
Indirect Costs	Overheads or administrative expenses that support the project indirectly, such as utilities, HR services, or institutional governance.
Intellectual Property (IP)	Creations of the mind that are legally protected, including inventions, literary and artistic works, designs, symbols, names, and images.
Joint Venture (JV)	A business arrangement in which two or more parties pool resources for a specific project or enterprise, sharing risks, responsibilities, and benefits.
Lump Sum Royalty	A one-time payment made for the right to use intellectual property, regardless of future sales or revenue.

Glossary of Key Terms

Term	Definition
Memorandum of Understanding (MoU)	A non-binding agreement that outlines the intentions, roles, and responsibilities of parties entering into a collaboration.
Milestone Payment	A staged payment in a licensing agreement, triggered when specific predefined project or commercialization targets are achieved.
Monitoring, Evaluation, and Learning (MEL)	A systematic approach for tracking project performance, assessing results, and integrating lessons learned into future planning.
Non-Exclusive License	A license that allows multiple parties to use the same intellectual property under agreed terms, enabling wider dissemination.
Public-Private Partnership (PPP)	A formal collaboration between public institutions, private sector actors, and often civil society, where risks, resources, and rewards are shared to deliver public value.
Quadruple Helix Model	An innovation model involving collaboration between four sectors: government, academia, industry, and civil society.
Royalty	A payment made to the owner of intellectual property for the right to use it, typically based on sales revenue or production volume.
Sublicensing	The granting of rights by a licensee to another party to use the licensed intellectual property, usually under terms approved by the original licensor.
Sustainability Plan	A strategy outlining how project benefits, impacts, and operations will continue beyond the funding period.
Theory of Change (ToC)	A visual and narrative description of how a project's activities are expected to lead to outputs, outcomes, and ultimate impact.
Unconscious Bias	Attitudes or stereotypes that influence decision-making and actions without conscious awareness, often resulting in unintentional discrimination. In research funding contexts, unconscious bias can affect peer review, hiring, and leadership opportunities, thereby impacting diversity and inclusion.

ANNEXES

Annex 1: Pre- and Post-Training Evaluation Form

Pre-Training Evaluation Form *(To be completed before the start of each module)*

Module Title: ______________________________
Participant Name: ______________________________
Date: ______________

Section A – Self-Assessment of Knowledge

(Please rate your knowledge for each topic on a scale of 1–5, where 1 = No Knowledge and 5 = Expert Level)

Topic	1 2 3 4 5
I understand the key concepts in this module.	☐ ☐ ☐ ☐ ☐ ☐
I can explain the relevance of this module to my work.	☐ ☐ ☐ ☐ ☐ ☐
I am familiar with the tools and methods discussed.	☐ ☐ ☐ ☐ ☐ ☐
I know how to apply the concepts in a real-world setting.	☐ ☐

Section B – Experience & Expectations

1. Have you received any previous training on this topic?
   ☐ Yes ☐ No
   If yes, please describe: ______________________________
2. What are your expectations for this training?

____

____

____

Section C – Comfort & Confidence Level On a scale of 1–5, how confident are you in using the knowledge from this module in your current role? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

SRIFA Training Manual – Post-Training Evaluation Form *(To be completed at the end of each module)*

3. What challenges do you currently face in this area?

Module Title: ______________________________
Participant Name: ______________________________
Date: ______________

Section A – Learning Gains *(Please rate your knowledge after the training on a scale of 1–5)*

Topic	1 2 3 4 5
I now understand the key concepts in this module.	☐☐☐☐☐
I can explain the relevance of this module to my work.	☐☐☐☐☐
I am familiar with the tools and methods discussed.	☐☐☐☐☐
I can apply the concepts in a real-world setting.	☐☐☐☐☐

Section B – Reflection

1. Which part of this module was most useful to you?

2. Which part needs improvement?

3. How will you apply the knowledge gained?

Section C – Training Quality Feedback Please rate the following on a scale of 1–5, where 1 = Poor and 5 = Excellent:

Item	1 2 3 4 5
Relevance of module content	☐☐☐☐☐
Trainer's delivery style	☐☐☐☐☐
Usefulness of examples	☐☐☐☐☐
Opportunities for interaction	☐☐☐☐☐
Quality of training materials	☐☐☐☐☐

Additional Comments:

Annex 2: Grant Proposal Checklist

Funder Alignment

☐ Researchedfunder'sthematicareas, priorities, and eligibility.
☐ Proposal aligns with SDGs and national strategies.
☐ Reviewed past funded projects for patterns.

Proposal Team & Partnerships

☐ Formed a proposal team ('Money Crew') with clear roles.
☐ Included Quadruple Helix partners (academia, government, industry, civil society).
☐ Secured Letters of Support or MoUs from partners.

Proposal Structure

☐ Title Page & Executive Summary completed.
☐ Problem Statement with national/regional data.
☐ Objectives are SMART.
☐ Methodology & Work Plan are clear and feasible.
☐ Beneficiaries identified with measurable impact.
☐ Pathways to Impact outlined (policy, commercialization, community).
☐ Theory of Change included (inputs → activities → outputs → outcomes → impacts).

Budget & Resources

☐ Budget is realistic, justified, and aligned with objectives.
☐ Costs categorized properly (Direct, Indirect, Allocated).
☐ MEL costs (5–10% of budget) included.
☐ Justification of Resources provided.

Risk & Ethics

☐ At least two key risks identified with mitigation strategies.
☐ Ethical issues addressed (consent, data security, conflicts of interest).
☐ Ethics approval pathway identified.

Proposal Packaging

☐ All annexes included (CVs, Letters of Support, institutional profile, baseline data).
☐ Formatting follows funder guidelines.
☐ Internal review by colleagues/mentors completed.
☐ Pre-submission quality control review done.

Submission

☐ Submission portal account created.
☐ All documents uploaded in correct formats.
☐ Submission confirmed before deadline (timestamp/email proof).

Annex 3: Gender Mainstreaming Scorecard Tool

This self-assessment tool helps research and innovation councils evaluate the extent to which gender equality and social inclusion are integrated into their governance, operations, and funding processes. It includes measurable indicators, a scoring system, and an interpretation guide.

Scoring Guide:
0 – Not in place
1 – Minimal progress
2 – Partially in place
3 – Fully in place and functional
4 –Bestpractice,fullyintegrated,andcontinuously improved

Section A – Policy & Leadership Commitment

Indicator	Score (0–4)	Evidence / Notes	Action Required
Council has a formal gender mainstreaming policy.			
Leadership publicly supports gender equality in council communications and events.			
Gender goals are included in the council's strategic plan.			
Council leadership ensures gender representation in senior decision-making roles.			

Section B – Governance & Representation

Indicator	Score (0–4)	Evidence / Notes	Action Required
Gender balance is maintained in council boards and committees.			
Recruitment and promotion processes include gender equity criteria.			
Council collects and reports sex-disaggregated data on staff and leadership composition.			
Council leadership monitors progress towards gender parity annually.			

Section C – Program Design & Funding Processes

Indicator	Score (0–4)	Evidence / Notes	Action Required
Gender is included as a requirement in all funding calls.			
Proposal review criteria include gender responsiveness.			
Peer review panels are gender-balanced and trained on unconscious bias.			
Funded projects report on gender outcomes in their deliverables.			

Section D – Capacity Building & Training

Indicator	Score (0–4)	Evidence / Notes	Action Required
Staff receive training on gender concepts and mainstreaming strategies.			

Indicator	Score (0–4)	Evidence / Notes	Action Required
Peer reviewers and evaluators are trained on gender-responsive assessment.			
Gender training is included in induction for new staff and council members.			
Council allocates budget for ongoing gender capacity building.			

Section E – Monitoring, Evaluation & Learning (MEL)

Indicator	Score (0–4)	Evidence / Notes	Action Required
Council has gender-specific indicators in its MEL framework.			
Funding recipients are required to report on gender-disaggregated results.			
Council evaluates the gender impact of its programs periodically.			
Lessons on gender integration are used to improve policies and programs.			

Section F – Overall Score & Action Plan

Area	Score Achieved	Maximum Possible	%
Policy & Leadership Commitment		16	
Governance & Representation		16	
Program Design & Funding Processes		16	
Capacity Building & Training		16	
Monitoring, Evaluation & Learning		16	
Total		80	

How to Use This Guide

1. Add up your section scores to get a total out of 80. Identify your
2. category from the table above. Use the Recommended Next
3. Steps as a roadmap for improvement. Re-assess annually to
4. track progress and adjust strategies.

Action Priorities:

1. ______________________________
2. ______________________________
3. ______________________________

Gender Mainstreaming Scorecard – Scoring Interpretation Guide

Maximum possible score: 80 points (16 per section × 5 sections)

Score Range	Category	Description	Recommended Next Steps
0 – 20	Beginner	Gender considerations are mostly absent from policies, governance, and operations. No formal framework in place.	- Develop a formalgender mainstreaming policy. - Assign a genderfocalpointor committee. - Provide introductorygender training for leadershipandstaff. - Integrate basicgenderindicators into the strategicplan.
21 – 40	Developing	Some gender initiatives exist but are not consistently applied. Limited data collection and monitoring.	- Formalize andenforcegender requirements in funding calls. - Train proposalreviewerson unconscious bias. - Collect andreportsex-disaggregated data regularly. - Increase representationofwomen in decision-makingbodies.
41 – 60	Established	Gender policies and practices are in place, with regular monitoring. However, integration is not yet comprehensive across all programs.	- Conduct annual gender audits to identify gaps. - Expand gender-responsive capacity building. - Strengthen MEL systems to track gender impact. - Share best practices and success stories publicly.
61 – 80	Leading	Gender equality and inclusion are fully integrated into all council functions, with continuous improvement and innovation.	- Mentor other institutions on gender mainstreaming. - Lead regional advocacy for gender-responsive research funding. - Innovate and pilot new inclusion strategies. - Maintain a public gender scorecard for accountability.

Annex 4: Digital Resource Links for Research Councils

1. Grant Portals & Funding Opportunities

- **GrantForward** - Comprehensive funding database for research, innovation, and capacity-building grants.
- **FundsforNGOs** - Global funding updates for NGOs, research institutions, and non-profits.
- **Devex Funding Platform** - Development and innovation funding opportunities worldwide.
- **Science for Africa Foundation** - Development and innovation funding opportunities worldwide.
- **African Academy of Sciences (AAS) - Funding Opportunities** - Competitive research and Innovation calls for African researchers.
- **Horizon Europe** - EU's largest R&I funding program, open to global collaboration.

2. Intellectual Property (IP) Offices & Databases

- **World Intellectual Property Organization (WIPO)** -Global IP registration, treaties, and databases.
- **African Regional Intellectual Property Organization (ARIPO)** - IP services for English speaking African member states.
- **Organisation Africaine de la Propriété Intellectuelle (OAPI)** - IP services for French-speaking African member states.
- **Patentscope** - Searchable global patent database by WIPO.
- **Nigeria Intellectual Property Office** - Official IP registration and protection body in Nigeria.
- **USPTO (United States Patent and Trademark Office)** - US patent and trademark database and registration services.

3. Donor Platforms & Development Partners

- **OECD Development Assistance Committee (DAC) Donor Profiles** - Profiles of major bilateral donors.
- **African Development Bank (AfDB) – Funding & Tenders** - Opportunities and tenders in African development.
- **World Bank – Funding & Tenders** - Global funding for development and innovation.
- **Bill & Melinda Gates Foundation – Grant Opportunities** - Funding for global health, agriculture, and education research.
- **Global Innovation Fund** - Grants, loans, and equity for scalable innovations in low-income countries.
- **USAID Development Innovation Ventures** - Supports breakthrough solutions to development challenges.

Annex 5: List of African Innovation Hubs & Networks

West Africa

- CcHUB (Co-Creation Hub)–Nigeria
  Website: https://cchubnigeria.com
  Leading innovation hub focusing on tech, social impact, and entrepreneurship across Africa.
- Wennovation Hub – Nigeria
  Website: https://wennovationhub.org
  Supports startups in agriculture, health, education, and clean energy.
- Impact Hub Accra – Ghana
  Website: https://accra.impacthub.net
  Part of a global network fostering entrepreneurship and innovation.
- iSpace Foundation – Ghana
  Website: https://ispacegh.com
  Provides coworking space, business development, and training for startups.

East Africa

- iHub–Kenya
  Website: https://ihub.co.ke
  Pioneering tech and innovation space for startups, researchers, and developers.
- Nailab – Kenya
  Website: https://nailab.co
  Accelerator supporting startups with mentorship, funding, and training.
- Outbox Hub – Uganda
  Website: https://outbox.co.ug
  Focused on early-stage startups, innovation challenges, and skills development.
- BongoHive – Zambia
  Website: https://bongohive.co.zm
  Innovation and technology hub supporting entrepreneurs through incubation and acceleration.

North Africa

- Flat6Labs – Egypt, Tunisia
  Website: https://flat6labs.com
  Regional startup accelerator with investment and mentorship programs.
- Orange Digital Center – Multiple Countries
  Website: https://digitalcenter.orange.com
  Digital skills and entrepreneurship support hub.
- IceAlex – Egypt
  Website: https://icealex.com
  Community innovation space for sustainable development and tech entrepreneurship.

Southern Africa

- mLabSouthern Africa – South Africa
  Website: https://mlab.co.za
  Supports mobile and digital entrepreneurs with incubation and skills training.
- Innovation Hub – South Africa
  Website: https://www.theinnovationhub.com
  Science and technology park fostering innovation-driven enterprises.
- BongoHive – Zambia *(Also listed under East Africa)*

Annex 6: Regional Research & Innovation Councils/Bodies

- African Union Development Agency (AUDA-NEPAD)
  Website: https://www.nepad.org
  Coordinates and implements continental development and innovation programs.
- African Academy of Sciences (AAS)
  Website: https://aasciences.africa
  Supports research excellence and provides competitive funding opportunities.
- Science Granting Councils Initiative (SGCI)
  Website: https://sgciafrica.org
  Strengthens the capacity of science granting councils in sub-Saharan Africa.
- West African Science Service Center on Climate Change and Adapted Land Use (WASCAL)
  Website: https://wascal.org
  Climate change research and capacity building network in West Africa.
- Southern African Development Community (SADC) – Science, Technology & Innovation
  Website: https://www.sadc.int
  Regional body promoting innovation policy and collaborative research.
- Economic Community of West African States (ECOWAS) – STI Programs
  Website: https://www.ecowas.int
  Supports research, innovation, and technology transfer within West Africa.
- Association of African Universities (AAU)
  Website: https://aau.org
  Network of African higher education institutions fostering research partnerships.
- African Observatory of Science, Technology and Innovation (AOSTI)
  Website: https://aosti.org
  AU body that supports evidence-based STI policy-making.

The African Technology Policy Studies Network (ATPS) is a transdisciplinary network of researchers, policymakers, private sector actors, and civil society promoting the generation, dissemination, use, and mastery of Science, Technology, and Innovations (STI) for African development, environmental sustainability, and global inclusion. In collaboration with like-minded institutions, ATPS provides platforms for regional and international research and knowledge sharing in order to build Africa's capabilities in STI policy research, policymaking, and implementation for sustainable development.

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