

Determinants of Research Capacity: Relevant factors and Population Groups That Influence Research Capacity in Africa



**The Collaboration for Research
Excellence in Africa (CORE Africa)**

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Executive Summary

The Collaboration for research Excellence in Africa (CORE Africa) has as its mission to develop a solid and sustainable research workforce in Africa, capable of tackling complex challenges through high quality research. As part of this mission, CORE Africa has identified the need to strengthen research capacity in Africa, and is committed to identifying areas where it can best contribute, as well as opportunities for collaboration and/or complementarity.

This document sets out factors that CORE Africa considers important determinants of research capacity. The concepts outlined in this report were developed from information generated through the analysis of the wider literature, policy documents and empirical studies. Panel discussions were also held with the CORE Africa project team and other researcher professionals, on how to incorporate current knowledge and best practices into research capacity strengthening (RCS) initiatives in Africa. The outcomes of these were relevant factors and population groups that can have an impact on research capacity in Africa.

Because every RCS initiative occurs in a unique context, the components outlined in this document are designed to be informative rather than staking any claims of being the gold standard. It is hoped that the information provided herein would be taken on as a tool for further discussion by other stakeholders working towards the realisation of sustainable, locally-led research in Africa.

Section 1:

Relevant factors that influence Research Capacity in Africa

The spectrum of research can be broken down into three complementary stages: engagement in research, research activity and continuity of research activity.

1. Engagement in research

Engagement in research is the phase of developing interest in research and making the decision to get involved in research activity. Engagement in research can be influenced by factors like awareness of the need or importance of research, educational background, influence of peers, exemplary work by leaders in the field, available research opportunities, etc.

2. Research activity

Research activity is simply the process of conducting research and producing research knowledge. This is key to increasing research output – one of the measurable factors used to assess research capacity. Research activity can be influenced by research skill, available funding, access to research facilities and support, research guidance, supervision, collaboration etc.

3. Continuity of research activity

For research to be sustainable, it is important for the research workforce to grow overtime, and for research activity to continue. This requires that researchers have reason to keep doing research e.g. through initiatives to retain researchers and provide, acknowledge research activity or output and provide incentives. It is also essential for research findings to be used appropriately e.g. for developing interventions and policy-making, so that the need for research is continually renewed.

Table 1: Factors that influence research capacity and sample methods that can be used out to address them

Factor	Description	Examples
Research awareness	Increasing public understanding on the need for and importance of research, and encouraging engagement in research activity	Programs that educate others on the importance of research e.g. through events, campaigns and social media platforms
Research education	Providing research knowledge through academic programs	Research-based courses e.g. Masters and PhD programs
Research training	Providing opportunities for research skill development	Research training programs, workshops, fellowships, conferences
Research infrastructure	Providing resources, facilities and equipment required for producing and disseminating research	Research training institutions, providing computers, internet facilities, libraries, books and lab equipment
Research guidance	Providing leadership, counselling and supervision for research	Mentorship programs
Research knowledge	Producing and publishing research findings	Published research, conference reports
Research collaboration	Working with others to produce research and creating initiatives to help promote collaboration among African researchers	Networks, partnerships, programs designed to promote or enhance research collaboration

Factor	Description	Examples
Research funding	Providing funds for research	Grants, scholarships, bursaries, Seed funding
Research incentives	Activities that encourage or motivate researchers and acknowledge research activity/output e.g. rewarding innovative projects, giving prizes, fee waivers, bonuses etc	Rewarding innovative projects, giving prizes, fee waivers, discounts, bonuses
Research utilisation	Using research findings for program development and policy-making	Training on interpreting, using or adapting research findings
Research employment	Providing job opportunities and career-routes for researchers	Paid research opportunities, career development services, career progression pathways

Section 2:

Key stakeholders that influence research capacity

The table below outlines the various population groups that can participate in research – either directly or indirectly, in a way that influences research capacity. These groups all fit into one or more of the three stages of the research spectrum outlined above.

Population group	Individuals
Academics	Students, graduates
Researchers	Independent researchers, research groups, scientists
Research institutions	Universities, organisations, institutions, collaborators
Policy makers	Governments, decision-makers at different levels
Funders	Any funding bodies
General public	General public