



# **Consortium for Advanced Research Training in Africa (CARTA): A model for training and retaining the next generation of African academics**

**UNIVERSITY LEADERS' FORUM: NEXT GENERATION OF ACADEMICS**

**University of Ghana, Legon**

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## Outline

- Brief overview of the issues
- Key elements of CARTA
- CARTA's current membership
- Timeline
- Related Initiatives
- Retention – What you can do
- About APHRC



## Rationale 1: Why a Consortium?

- Universities in Africa remain the key intellectual hub
- The future development of the region rests with universities
- Yet, they face enormous constraints including:
  - Unprecedented growth in undergraduate enrolment and expansion of training programs (337k in 1980 to 4m in 2004 – WB 2005)
  - Inadequate funding (Budgetary share of higher education ↓ from 19% (1980-84) to 15% (2000-05))
  - Reliance on PhD-by-thesis model



## Rationale 2: Consequences

- Steady loss of university staff
- Low research output
- Doubts in the capacity of African universities to produce globally-competitive graduates
- African scholars remain marginal to research
- Weak preparation of the next generation of African scholars



## Rationale 3 : Current realities

- Current stock of African academics mostly trained overseas
- Overseas training opportunities are much more limited
  - High and escalating costs
  - Low rates of return of overseas-trained PhDs
  - Those who return often drift away from teaching and research





## Rationale 4: Implications

- African Technical Department Report (2002): ‘if nothing urgent is done now, African universities will be empty of brains in the next few decades’.
- African Partnership Forum (2007): Africa currently employs up to 150,000 expatriate professionals at a cost of US\$4 billion a year to fill the human resource gap created by brain drain
- The continent’s share of global scientific output fell from 0.5% in the mid-1980s to 0.3% in the mid-1990s

## Rationale 5: The Challenge ahead

- Majority of the next generation of academics in sub-Saharan Africa will be trained locally
- Urgent need for globally-competitive graduate programmes
- No individual university or country has the human resource capacity for such programs
- Hence.....
- The CARTA Consortium





# Goals of the Consortium

- a) Facilitate creation of globally-competitive multi-disciplinary doctoral training program
- b) Strengthen technical skills of doctoral students
- c) Retain trained capacity within Africa
- d) Create critical mass of multi-disciplinary research teams within universities
- e) Strengthen research management, administration, & supervision skills
- f) Increase research output & productivity
- g) Create opportunities for multi-country Africa-led research partnerships
- h) Strengthen linkages between research & policy



# Key Elements of CARTA

Overview

**CARTA elements**

CARTA members

Timelines

Related Initiatives

Retention

About APHRC



# Student training

- **Strengthening doctoral training**
  - Joint Advanced Seminar Series
  - Online support – STATA user group model
  - Participation in international conferences
  - Targeted sandwich/internship at a Northern or Southern university
  - Research grants for student-initiated projects
  - Library support to students
  - Post-doctoral components
  - Monthly stipend to facilitate fulltime studentship



# Student training

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Related Initiatives

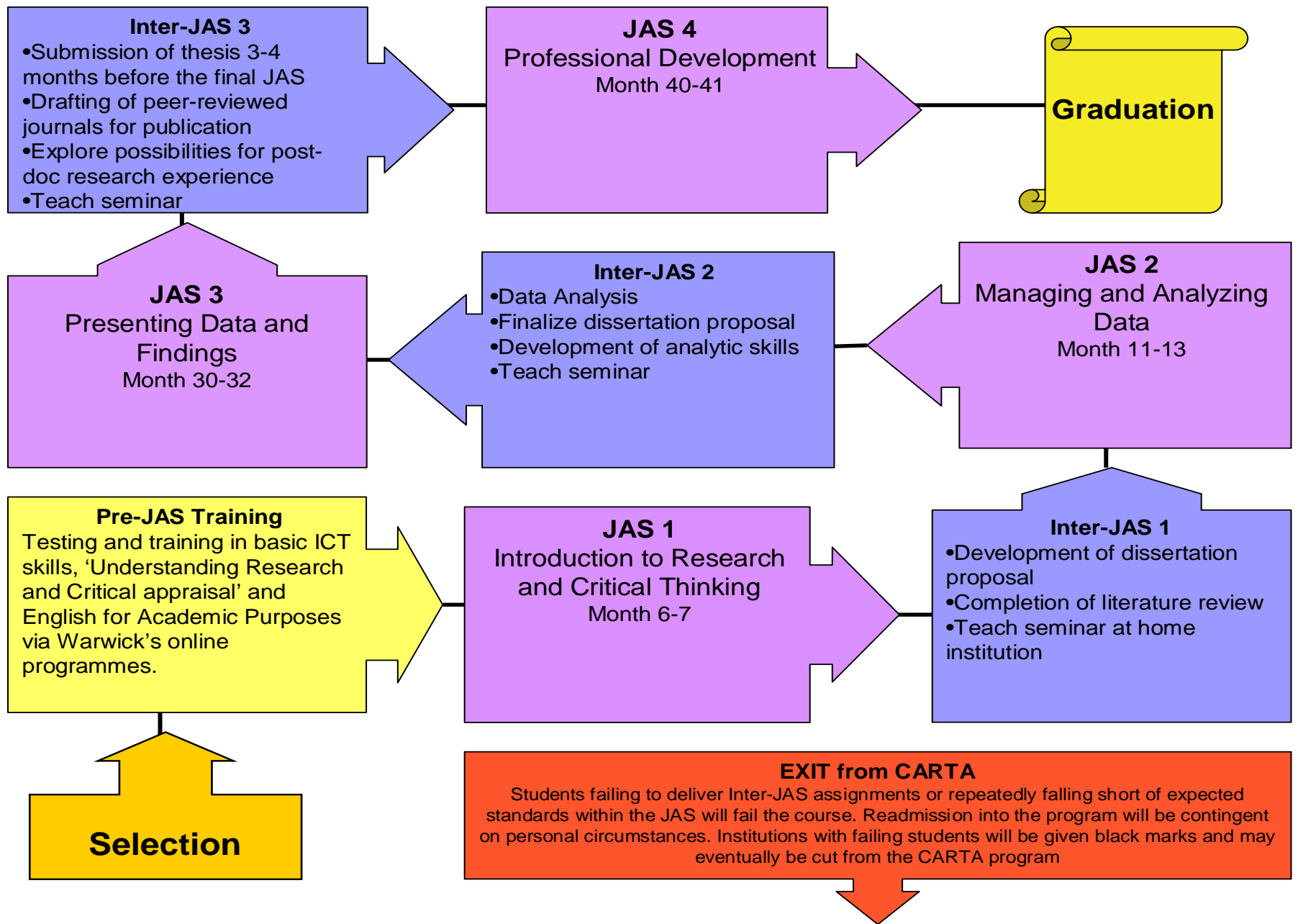
Retention

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## • JASS Model

- **Stage 1: Introduction to critical thinking/research**
  - Interdisciplinary research, conceptualizing research projects, research design, developing instruments, literature & data resources, research ethics, etc.
- **Stage 2: Data analysis**
  - Mixed-methods approaches, identifying appropriate analytical models, model assumptions, common errors in data analysis, basic analysis to complex modelling, etc.
- **Stage 3: Interpretation and writing up of results**
  - Communicating research to policy makers, presentation skills, scientific publications, identifying appropriate journals, etc.
- **Stage 4: Beyond PhD**
  - Proposal writing, budgeting, managing research grants & partnerships, research ethics, developing course outlines & teaching materials, research & policy linkages, etc.





# Institutional capacity building

Overview

CARTA elements

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- Training sessions for faculty & staff
  - Supervision of doctoral students
  - Grant writing
  - Research management and administration
  - Management of partnerships
  - Leadership skills
- Infrastructural support
  - Internet connectivity, library, computers, **etc**
- Support in developing multi-disciplinary research programs

**\*\* Development of institutional capacity to support research and training**



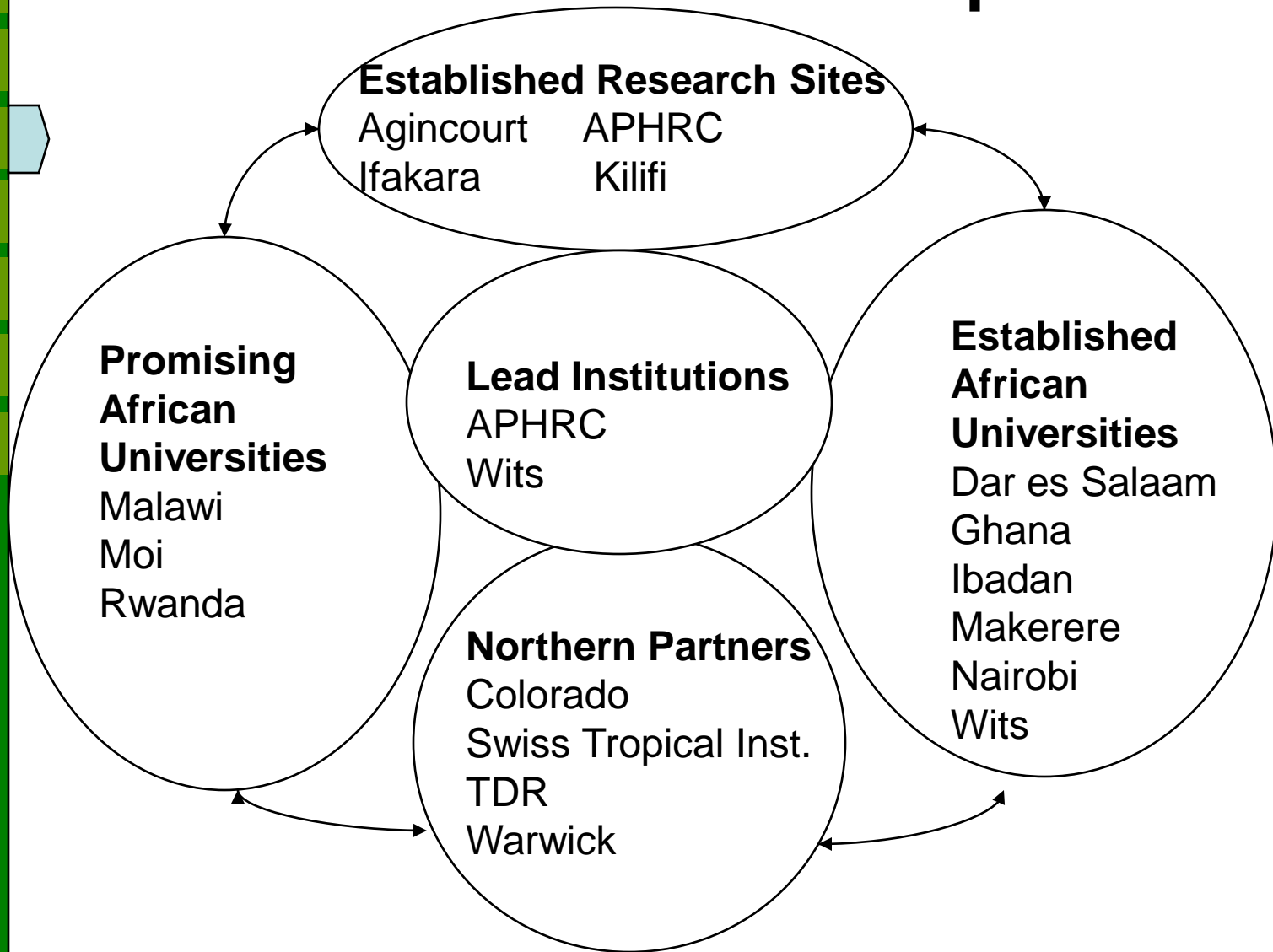
# Current Membership

African Universities	African Research Centers
Makerere Univ., Uganda	APHRC (Kenya)
Moi University, Kenya	Ifakara Health Institute, TZ
National Univ. of Rwanda	KEMRI/WT Res. Program, KE
Univ. of Dar es Salaam, TZ	Agincourt PHU/Wits, SA
University of Ghana	<b>Northern Partners</b>
Univ. of Ibadan, Nigeria	WHO/TDR
University of Malawi	Swiss Tropical Institute
Univ. of Nairobi, Kenya	University of Colorado, USA
WITS, South Africa	University of Warwick, UK

**\*\* On-going discussions many others**



# Current Membership



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# Timelines

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**Timelines**

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May 2006	Roundtable on doctoral training in Africa
June 2006 – June 2007	Consultations
Jan. 2008	1 <sup>st</sup> Meeting of partners – in Dar es Salaam
Feb. 2008	Submission of EoI to Wellcome Trust
May 2008	Invitation to submit a full proposal
Sept 2008	Full proposal submitted
Ongoing	Raise additional funds to increase number of students from 14 to 25 per cohort
Jan. 2009	Rollout of the Program





# Other Capacity Building Initiatives

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- CARTA-Med
  - Research training for medical doctors during specialization
  - Training of mid-level health workers
- African Doctoral Dissertation Research Fellowship (ADDRF)
- Technical workshops
- Internships
- Research traineeship programs
- Sabbatical fellowships



# Retention: What we can do

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- Flexible appointments
  - Existing expertise outside the university
  - Research appointments
- Redefine parameters for salary negotiations
- Recognize and reward research productivity
  - Buy out time
  - Promotions – defined by output rather than years of experience
- If accounts/bursary is a problem, outsource!
- Apply limited research funds to productive faculty



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# The African Population and Health Research Centre



# Background

- Pan-African Research Institute set up in 1995 as a fellowship program of the Population Council with funding from the Rockefeller Foundation
- Became autonomous non-profit international organization in 2001
- Current Status
  - 501(c) 3 status in the US
  - Headquarters agreement with Govt. of Kenya



# Vision and Mission

- **Vision**

“To be a global centre of excellence, consistently delivering sound scientific evidence for policy and action”

- **Mission**

“Promoting the wellbeing of Africans through policy-relevant research on population and health”



# Institutional Objectives

- Provide an enabling environment for African scholars
- Strengthen professional and institutional research capacity
- Promote the dissemination and utilization of research findings for policy and program improvement

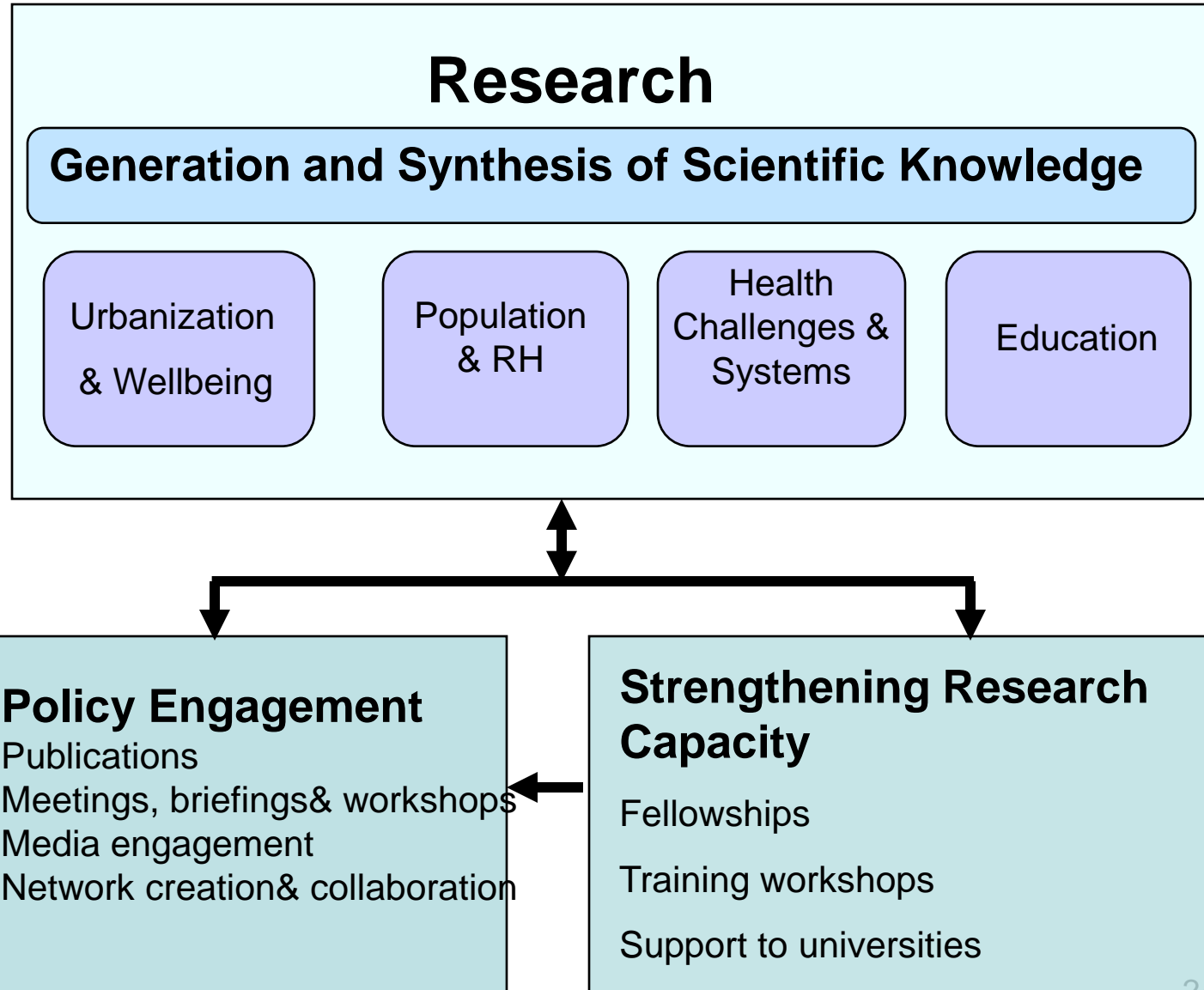


# Who we are

- About 40 Research Staff
  - Multi-country (from 12 African countries)
  - Multi-disciplinary team
    - Demography, Biostatistics, Health Economics, Development Economics, Sociology, Anthropology, Socio-linguistics, Public Health, Epidemiology, Education Policy/Planning
  - 20 PhDs and 19 MA/MSc/MPH degree holders
- 17 Administration and Support Staff
- 75+ Field and Data Entry Staff
- About 150 field staff on short term contracts



# Core Areas





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Conclusion

*If we consistently apply the same strategies that have failed us over the years, we can't expect a different outcome tomorrow!*





**Thank You!**

