



THE AFRICAN CAPACITY  
BUILDING FOUNDATION

FONDATION POUR LE RENFORCEMENT  
DES CAPACITES EN AFRIQUE

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# Research Capacity in Africa

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# What is the state of research capacity in Africa today?

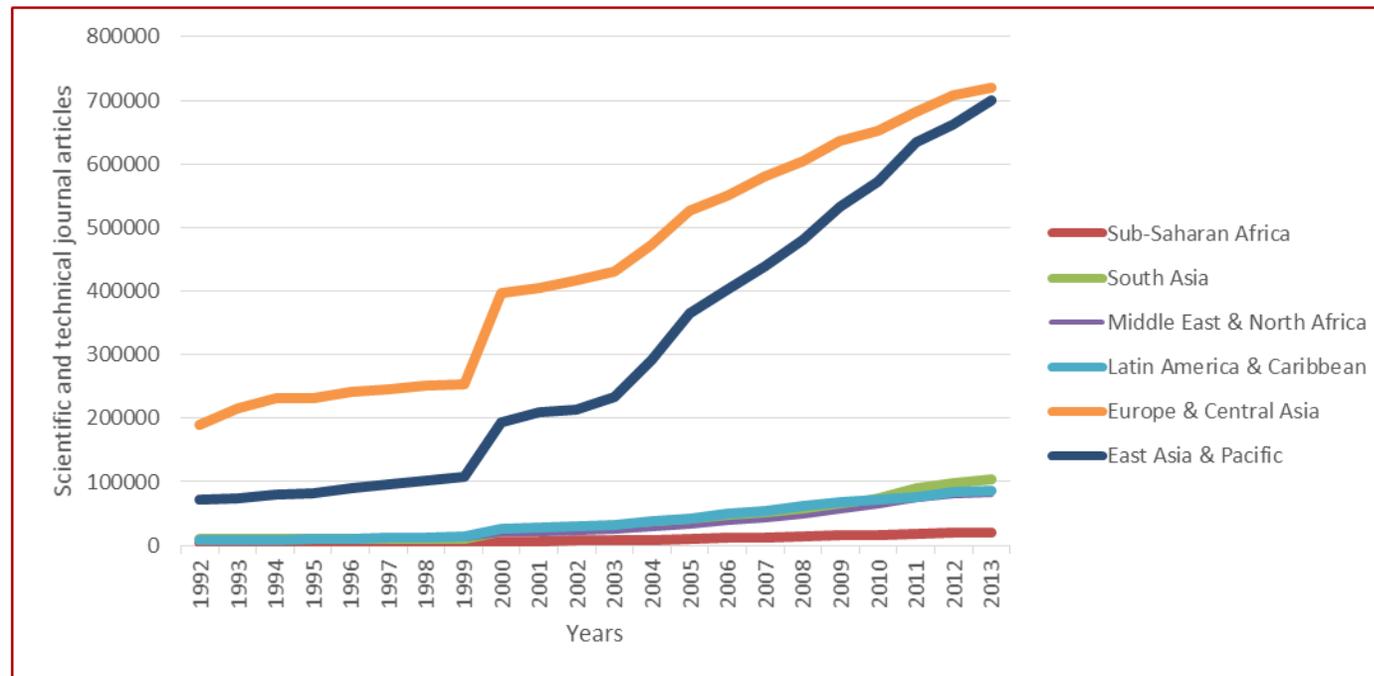
- Despite notable progress and the invaluable role of ACBF in the past 25 years, capacity deficits remain significant and continue to hobble Africa's development.
- Deficiencies in research capacity are particularly significant and troubling.
  - The situation is serious!
- SDGs provide a unique opportunity for capacity development and they may not be achieved if strong and urgent action is not taken on research capacity.
- ACBF has a critical role to play but Governments and other Partners must also do their part.

# Research capacity has grown only marginally

- Compared to other regions, research output is increasing but at very low pace in Africa
- While research outputs is growing at around 89% in regions like East Asia & the Pacific as well as Europe and Central Asia, its almost stagnant in Africa particularly in sub-Saharan region

Overall number of articles for Africa and comparator regions, 1992-2013

Source: World Development Indicators, 2016



# A yawning gap in research capacity that Africa has to bridge is in the STEM sector

- In Sub-Saharan Africa, research in the physical sciences and STEM makes up only 29 percent of all research, compared to an average of 68 percent in Malaysia and Vietnam.
- African research is dominated by Algeria, Egypt, Kenya, Nigeria, and South Africa.
- Sub-Saharan Africa relies on overseas collaboration and visiting academics for a steep share of its research output. Some 40–80 percent of its science and technology innovation publications are with external partners.
  - Mostly in health and agriculture, of most interest to international donors, to the neglect of areas, such as engineering needed to enable Africa to develop fundamental STEM research—despite decades of extractive resource activity.
- Donors' heavy influence also dissuades Africa from looking within its own research communities.
  - inter-African collaborations are just 2 percent, 2.9 percent, and 0.9 percent of all East African, Southern African, and West and Central African output.



# Why has research capacity remained so low?

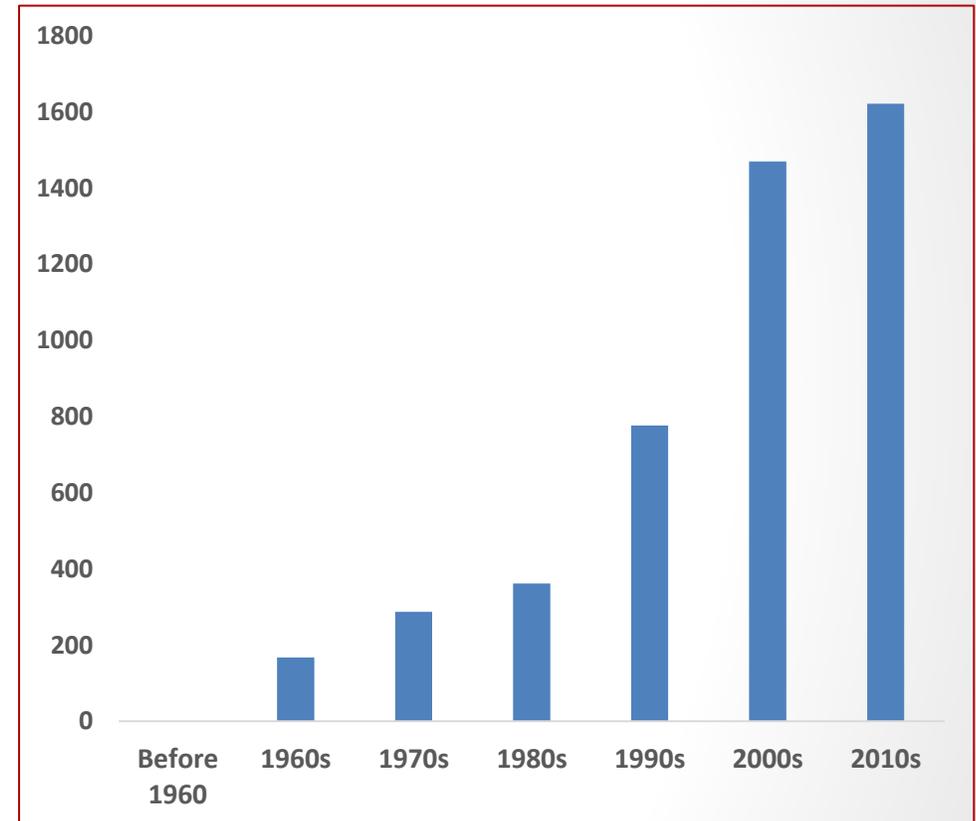
- **Some progress and commendable efforts have been made but significant issues and challenges remain:-**
  - Progress has been made by African countries and their local and international partners in particular in supporting individuals and networks, in health, agriculture, etc.
  - Through state support, support from bilaterals, multilaterals and private foundations.
  - By way of partnership and collaboration, individual training, institutional support, support to networks, etc.
- **Why is research capacity so low 50+ years of independence?**
- **History and external forces:-**
  - Colonial—not much research capacity was built...
  - Post-colonial:-
    - 60s and 70s saw some initial progress
    - Late 70s and 80s Tertiary education and hence, research, was practically abandoned thanks to the neo-liberal emphasis on primary education to the detriment of tertiary education and ultimately the depletion of research capacity



# Another explanation: The great paradox--increasing number of universities; stagnating research output

- **Concentration on professional degrees**
- **Inadequate policy support**
  - Lack of national and institutional policies and programs to stimulate collaboration and knowledge exchange between research subsystems with industrial and business subsystems.
- **Inadequate infrastructure and brain drain**
  - Inadequate research infrastructure, high levels of brain drain and low quality of research institutions.
- **Low subsidies**
  - Dwindling public subsidies and unpredictable international donor support. As a result, research and innovation systems face severe financial deficits and lack of capacity to formulate and drive their own domestic research agendas.
- **Inadequate funding**
  - Though the African Union had adopted a resolution committing each African country to spending 1% of its gross domestic product (GDP) on research and development, the continent is still lagging far behind at 0.4%.

*Number of universities in sub-Saharan Africa*



*Source: World Development Indicators 2016 & Guide to Higher Education in Africa, 2013*



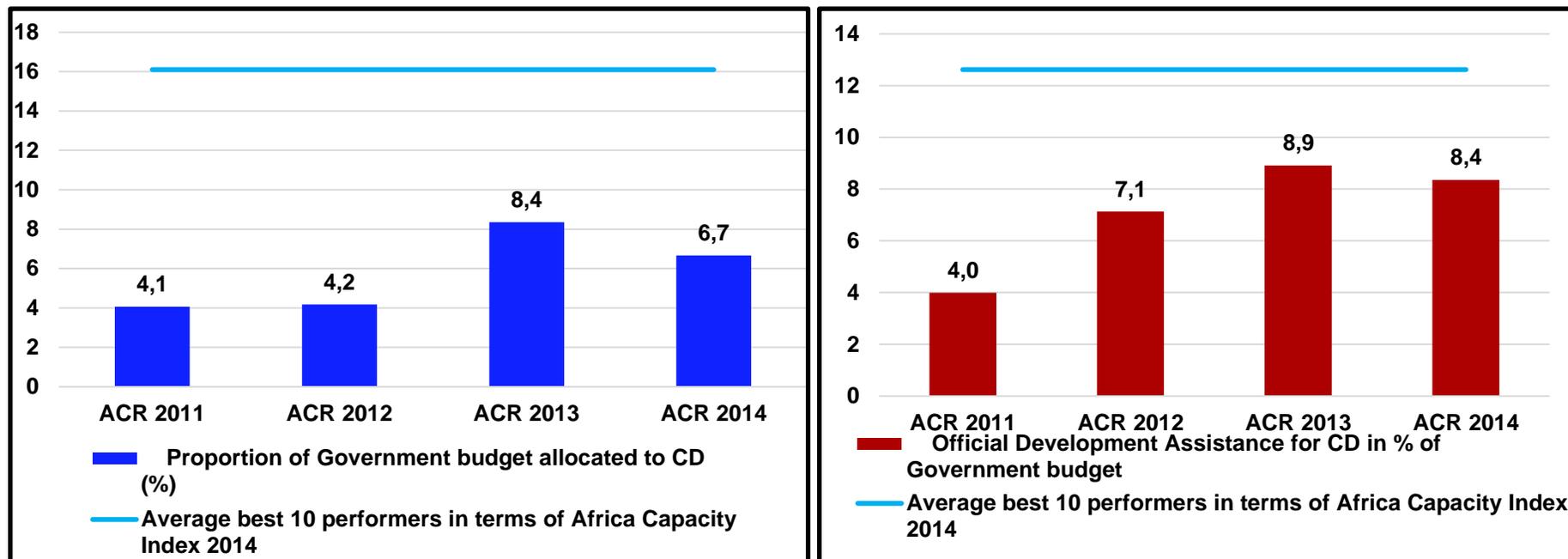
# Yet there are other significant issues and challenges to worry about...

- **Old habits die hard...**
  - Partnerships and collaboration are good but there are still issues of...
    - minimizing the potential harm of unequal partnerships, avoiding exploitation, creating the necessary trade-offs, maintaining relevance and ensure sustainability of interventions.
- **Crowding...**
  - The field is now crowded with many bilateral and multilateral partners delving directly into CD while at the same time, with few exceptions, African universities and capacity building organizations—the key capacity builders—are in serious state of distress.
- **Modus operandi**
  - Focusing on what is sexy instead of what is fundamental or what is really transformative but not trendy as well as focusing solely on programs while neglecting institutional support
- **The critical Issue of Funding**
  - The Key challenge to implementing capacity development strategies is FINANCING!!
  - Financing is not adequate, predictable and sustainable



# Financing Gaps in Capacity Development

Proportion of Government budget allocated to capacity development (%) & Official Development Assistance for CD in % of Government budget



**Notes:** For the majority of countries, budget allocated to CD is proxied using government expenditure on education

**Source:** ACBF Africa Capacity Reports 2011-2014

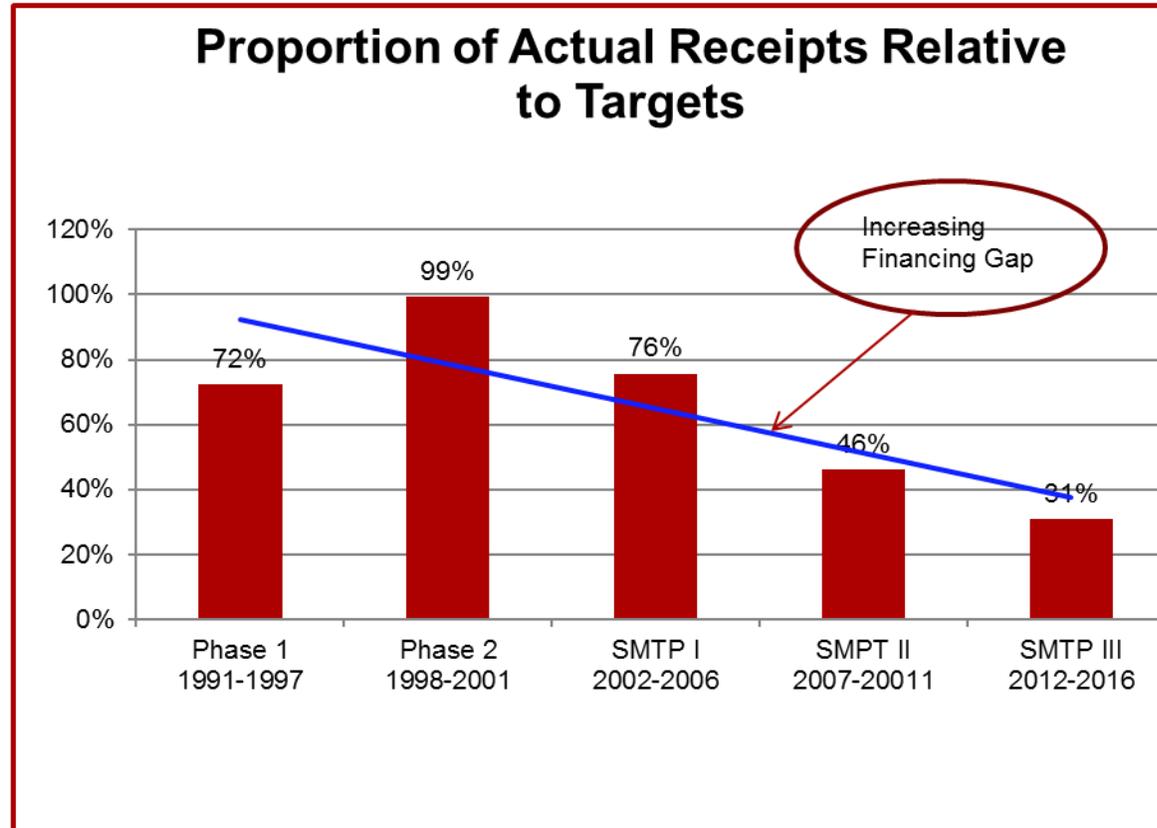
*Proportion of Government budget allocated to CD (%) is relatively low (less than 7 percent on average for the 45 countries surveyed in 2014)*

*Also, ODA for capacity development in % of Government budget relatively low (less than 9 percent on average for the 45 countries surveyed in 2014)*

The continent remains far from the target set by the Lagos Plan of Action and AU 2007 initiative calling on African countries to allocate 1 percent of gross domestic product (GDP) to science. With Africa's combined GDP at approximately \$2.6 trillion, the amount that could be allocated to science is \$200 billion.

# Financing Gap: The Example of ACBF

Summary of ACBF Financing (1991-2016), as a Percentage of Targets



## Case of ACBF:

- **Adequacy:** *estimated funding at creation (1 billion US\$) vs. investments so far (700,000 US\$)*

- **Predictability:** *Variations in financing from one 5-year strategy to the other, from all Partners.*

- **Sustainability:** *Reduction of overall financing envelope. Financing Gap increasing from a low of 1% in Phase 2 to 69% in SMTP III*

# How do we rebuild research capacity in Africa and ensure effectiveness of interventions?

**A lot has been recommended inside and outside of Africa with which we agree, for instance:**

- Network, collaborate, communicate and share experiences
- Understand the local context and accurately evaluate existing research capacity
- Ensure local ownership and secure active support
- Build in monitoring, evaluation and learning from the start
- Establish robust research governance and support structures, and promote effective leadership
- Embed strong support, supervision and mentorship structures
- Think long-term, be flexible and plan for continuity
- Strengthen universities and graduate programs
- Build partnerships based on mutual trust and respect
- Respond to beneficiary demand and minimize cumbersome requirements
- Understand local context and build on existing capacity
- Support capacity to link research to local priorities
- Support research-industry linkages

*The Seven principles for strengthening research capacity in low- and middle-income countries: simple ideas in a complex world, by ESSENCE Good practice document series in*

*2014*

*ODI and others*



# Yet addressing research capacity building challenges requires innovation and a holistic approach...

## Latest developments in capacity development that can benefit research capacity building

- Multidimensional approach and focus on full system performance
- Multilevel, multi-stakeholder, multi-year programs
- Regional approach
- Working with existing institutions
- Dynamic capacity development
- Soft capacities or the issue of more evident vs. less evident
- Political economy issues
- Ownership and leadership
- Capacity retention and capacity utilization

## Holistic approach to the capacity development ecosystem complex—ACBF's way

- Addressing issues along the entire capacity development ecosystem complex
  - The individual level, the change agents, the context environment and the enabling environment
- Closing the knowledge loop
  - We cannot also ignore the necessary action along the knowledge value chain, loop or cycle
- Emphasizing capacity retention and capacity utilization
- Enhancing intraregional mobility
- Mobilizing African Diaspora intellectual capital
- Organizing tripartite education dialogues
- Upscaling Investment in capacity development



# ACBF'S RESPONSE

ACBF addresses capacity development challenges in Africa using a catalytic approach centered on four strategic pillars

## Pillar 1: Enabling effective delivery of continental development priorities

- Directly targets the African Union, RECs, and other pan-African institutions. The aim is to support them in developing and deepening the overall continent's transformation and to ensure that the aspirations are achieved

## Pillar 2: Supporting countries to achieve tangible development results

- Focuses on the capacity of state actors to drive the implementation of development programs. Key is IMPLEMENTATION CAPACITY!

## Pillar 3: Enhancing private sector and civil society contributions to sustainable development

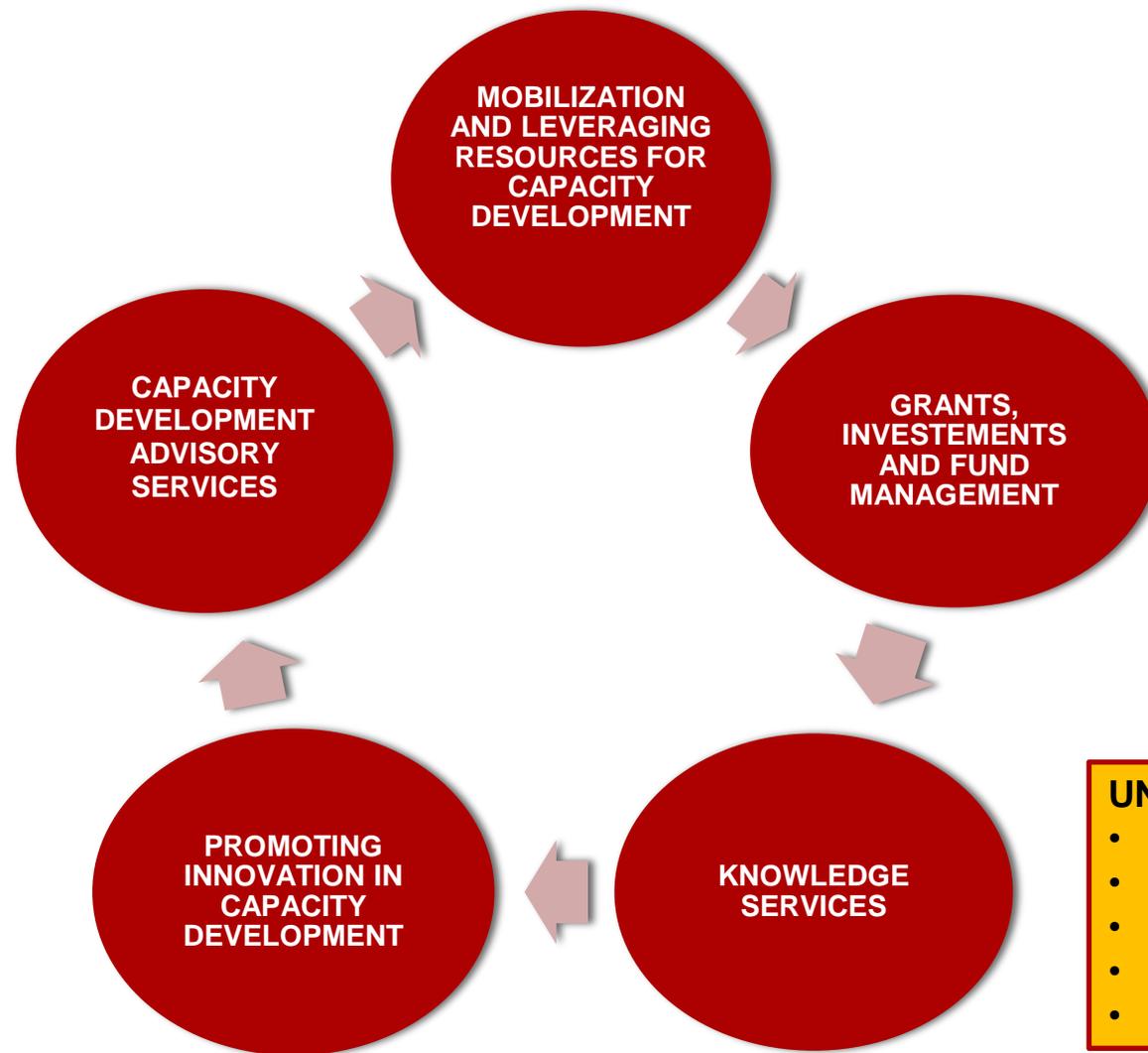
- Targets the capacity of non-state actors and institutions, particularly civil society and the private sector, to enhance their engagement in delivering development priorities on the continent

## Pillar 4: Leveraging knowledge and learning to increase development effectiveness

- Seeks to increase the access to and use of knowledge for better articulation of capacity development strategies and programming

**Capacity development projects must be guided by the principles of patient capital, beneficiary ownership and participation but must include at the onset, strategies for capacity retention, utilization and sustainability of interventions**





- UNDERLYING PRINCIPLES**
- Participatory approach
  - Client Ownership
  - Partnerships
  - Value addition
  - Sustainability

## DELIVERY MECHANISMS

ACBF Capacity Development Model



# ACBF's experience in supporting research capacities

## ACBF experience in supporting research capacities

### ❖ ACBF's own research

#### ❖ *Knowledge on capacity development and Africa's capacity development outlook*

- Africa Capacity Reports, Occasional papers' Development memoirs, Policy Briefs, Case Studies, Guides

### ❖ *Direct Support to Research Capacity Development*

#### ❖ *Creation of and Support to Research institutes and Think Tanks*

#### ❖ *Regional training programs* (PTCI, CMAP, CMAEE, CPP, EPM, EPAM, AIST)

#### ❖ *Research networks* (AERC, SSG, AfCoP, ATTN)

#### ❖ *Research units in RECs*

### ❖ *Indirect Support*

#### ❖ *Universities, including AAU*

#### ❖ *Intergovernmental Institutions* (WAIFEM, MEFMI)

#### ❖ *Networks and communities of practice*

### Research success stories

1. The Zambia Institute for Policy Analysis and Research (ZIPAR), in promotion of good governance, developed an alternative allocation model aimed at enhancing allocations of the Constituency Development Fund (CDF) – a reference point for other countries in the region.
2. Research study by Ethiopian Development Research Institute (EDRI) underpinned the establishment of the Ethiopian Commodity Exchange
3. Research by Economic and Social Research Foundation (ESRF) supported initiation of the Fish Pond Value Chain programme in Tanzania touted for food security



# Opportunities for partnerships in research

## Overview of Swedish research aid priority areas

### Priority areas of Swedish research aid

1. Democracy, human rights and freedom of expression
2. Gender equality
3. Environment and climate
4. Health
5. Agriculture and food security
6. Education
7. Sustainable societal development
8. Conflict, peace and security
9. Humanitarian aid

**...fully in  
line with  
Africa's  
priorities**

### Africa's Agenda 2063

1. Democratic values, practices, universal principles of human rights, justice and the rule of law entrenched (**Goal 11**)
2. Full Gender Equality in All Spheres of Life (**Goal 17**)
3. Environmentally sustainable climate resilient economies and communities (**Goal 7**)
4. Healthy and well-nourished citizens (**Goal 3**)
5. Modern Agriculture for increased productivity and production (**Goal 5**)
6. Well educated citizens and skills revolution underpinned by science, technology and innovation (**Goal 2**)
7. Transformed Economies (**Goal 4**)
8. Peace Security and Stability is preserved (**Goal 13**)
9. Democracy; Governance; Human Rights; Constitutionalism and Rule of Law and Humanitarian Assistance fully functional and operational (Continental target under **Goal 11**)

**ACBF which has already produced strategic studies on the capacity imperatives for Agenda 2063 can partner/coordinate in the conduct of fit-for-purpose and well-targeted research and capacity development in these areas.**



# Overall...

- *A Severe research capacity deficit Is Gripping Africa*
- Africa's stocks of human capital in research areas are exceedingly low
- *A low level of African research constitutes a significant threat to achieving "The Africa We Want" and the sustainable development goals*
- A research capacity development agenda has not been sufficiently and proactively pushed forward **in over two decades**
- A growing and worrisome reliance on expatriate professionals in the execution of Africa's complex and sophisticated development issues
- Insufficient effort to develop and implement specific capacity retention and capacity utilisation policy packages at national and regional levels

## We must strengthen African Universities!

- ❖ *Universities are at the core of research delivery*
- ❖ *They must be the main focus of research capacity building*
- ❖ *For effective and successful strengthening of human and institutional capacities of universities, an understanding of the ecosystem is needed – an important area of research on its own.*

# In sum...

- **Deficiencies in research capacity in Africa are quite significant**
- **Research capacity has remained low for a number of historical and contemporary reasons--universities must step up**
- **Although there is progress and commendable efforts by Africans and their partners, significant issues and challenges remain, primarily the issue of insufficient, unpredictable and unsustainable funding for capacity development**
- **These challenges are surmountable if we do some fundamental, innovative and strategic things and use holistic approaches**
- **SDGs provide a unique opportunity for rethinking research capacity development**
- **They can help drive innovations in research capacity development and in rebuilding research capacity for innovation**

# Thank you for your Attention

Nous vous remercions pour votre  
attention

