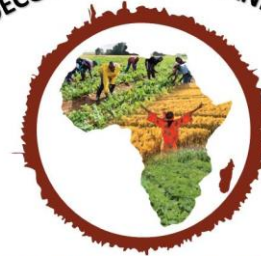


TRANSFORMING AGRICULTURE IN AFRICA
AGROECOLOGY and ORGANIC TRADE



Reducing Synthetic Pesticides and Fertilizers

Financing Research and Innovation

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Content:

- “ •— *The background and context of research and innovation financing in agriculture*
- *Old & new financing models and approaches*
- *Key messages*
- *Conclusion and recommendations*

Background and Context of R&I Financing in Agriculture

- The role of knowledge – its generation, transfer, uptake and utilization has become a key topical issue as countries transition to the knowledge-based economy.
- Research and Innovation (R&I)– the two methods of generating and utilizing knowledge can only be sustained through adequate funding and investments.
- In order to increase the funding/financing opportunities for R&I under the current global financial crises and national cutbacks in R&D budgets, new approaches must be considered (**Ozor, 2015**).

Background and Context of R&I Financing in Agriculture

Unfortunately,

- Countries are yet to meet the AU 1% investment in R&D some 38 years later
- Few countries have complied with the Malabo declaration of 2014 requesting 10% budgetary allocation to agriculture
- Expenditures continue to dwindle even when investments are made/committed

Distinguishing between Financing & Funding of R&I

- While “**funding**” refers to money provided by an organization or government on the basis of an agreement for the provision of goods and services and with no requirements to pay back the capital, “**financing**” on the other hand refers to money provided with the expectation to pay back the capital amount along with a certain percentage of interest.
- **Funding** needs of organizations usually come from donations made by governments or philanthropists while **financing** needs are usually provided by financial institutions such as banks, or investors like venture capitalists, business angels, shareholders, etc.

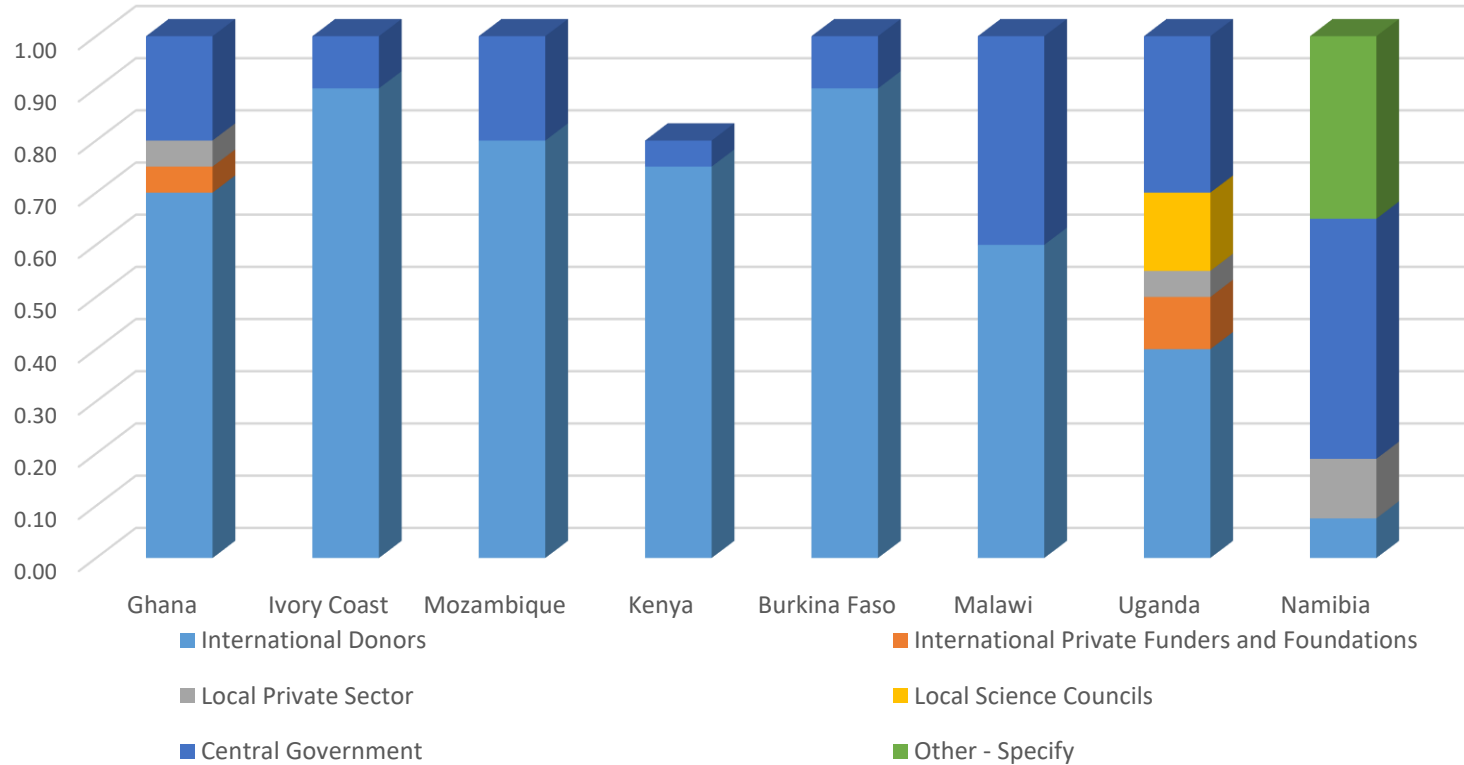
Key Results from a recent R&I Study in Africa

Mugwagwa, J., G. Banda, Nicholas Ozor, M. Bolo, and R. Oriama (2019) New Approaches for Funding Research and Innovation in Africa, African Technology Policy Studies Network (ATPS), *Research Paper No 30*.

Important Priorities Driving Funding/Financing for Research and Innovation



Historical Contribution to R&I Funding



Old & New financing models and approaches

Funder	What is funded	Funding Mechanism	Rationale
Government	<ul style="list-style-type: none"> - Basic Research - Applied Research - Translational Research - Commercialisation - Entrepreneurship (SMEs) 	<ul style="list-style-type: none"> * Grants and grand challenges * Public institution co-funding on inter/multidisciplinary programmes * Innovation brokerage * Formation of national research funding consortia * Co-funding with SGCI in the Region * Investment in high-end research programmes, e.g.. Chairs (240 in SA) and Centres of Excellence, etc. 	<p>Traditionally governments have funded basic, applied and translational research as investment in economic growth and development. Investment in public goods.</p>

Old & new financing models and approaches

Private Sector	Applied Research Commercialisation	* Retained profits and borrowing for capital markets * Corporate Social Responsibility	Profit driven motives
Public Private Partnerships	Applied Research Commercialisation	* Equity and project funding	Solving market failure issues
Impact Investors	Commercialisation	* Equity or debt	Solving market failure with a focus on social goods
Non-Governmental Organisations	Commercialisation	* Equity or debt	Solving market failure

Old & new financing models and approaches

Capital Markets	Commercialisation	Equity	Attractive return on investment in the venture
Crowdfunding	Research and commercialisation	Equity	Social investment because of market failure
Local and International collaborative research grants	Research	Grants	Scarcity of local funding for research in many African nations
Private sector	Take-over of applied research after proof of concept, safety and efficacy	Patent buyouts	Innovators either selling off patents to fund more innovation or researchers not interested in entrepreneurship

Old & new financing models and approaches

Charities	Basic and applied research as well as clinical trials	Grants and co-funding academia and SMEs working neglected areas	These tend to be niche areas such as rare diseases where market failure is common
Cities or regions	Land, labour and utilities	Grants given as incentives to firms that relocate to a city or region targeting industrial development	Attracting particular industrial activities to a particular city or region to boost economic activity and contribute to rejuvenation of de-industrialised places

Key Messages



1.
Africa needs
funding for research
and innovation that
is consistent,
sufficient, relevant
and sustainable

2.
New and innovative
funding approaches
developed leverage
to a large extent on
partnerships, co-
funding and multi-
disciplinary
arrangements

Key Messages

3.

Innovative funding models based on new coalitions between the public, private and non-profit sectors is required to support seamlessly the different stages of the research, translation and innovation value chain

Key Messages

4.

African countries have developed some innovative and dynamic new funding models, and more can be done to adopt and deploy other regions' innovative research and innovation funding models to mitigate decreasing traditional sources of funding for research and innovation.

Key Messages

5.

There are context-specific and context-transcending historical, technical, social, political and economic factors that stakeholders in the research and innovation ecosystem need to address if they are to optimise funding of research and innovation.

Conclusion

- Dynamic funding models have been developed, countries, organizations and individuals need to determine which model works best for them under the prevailing circumstances
- Models encompassing partnerships, co-funding and multidisciplinary approaches seek to ensure context-driven, efficient and effective utilization of scarce resources
- Challenges such as lack of political goodwill, lack of implementation plans and uncoordinated approaches hamper the harnessing of funding for R&I

Some Recommendations

- Governments need to develop unifying long-range and operationable national ideologies on R&I modelled around the comparative advantages they have
- Compliance to regional and continental treaties
- Deployment of diverse funding models
- Development and implementation of forward-looking policies and institutions for funding R&I

Thanks!

ANY QUESTIONS?

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