

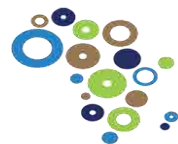
The PASET Regional Scholarship and Innovation Fund (RSIF)

Strengthening RSIF partnerships with Japanese Private Sector

Cynthia Orangó
RSIF RCU
Tokyo, Japan
September 3, 2019

The **PASET** Regional Scholarship
and Innovation Fund

An Africa-led initiative to bridge the skills gap in Applied Sciences, Engineering, & Technology



PASET
Partnership for Skills
in Applied Sciences,
Engineering & Technology

Regional Coordination Unit



Introduction

The future we want starts with how we do business in a sustainable manner today!

How?

...embrace sustainable & transformative technologies!

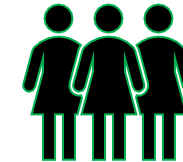


African economies are among the fastest growing in the world. The continent is poised to actively contribute to global development.

Sub Saharan GDP Growth Rate projected to grow from

2.9% to 3.9%

between 2017 and 2020



Africa to account for $\frac{1}{4}$ of World's population by 2050

Source: African Economic Outlook 2019

The **PASET** Regional Scholarship and Innovation Fund



An Africa-led initiative to bridge the skills gap in Applied Sciences, Engineering, & Technology



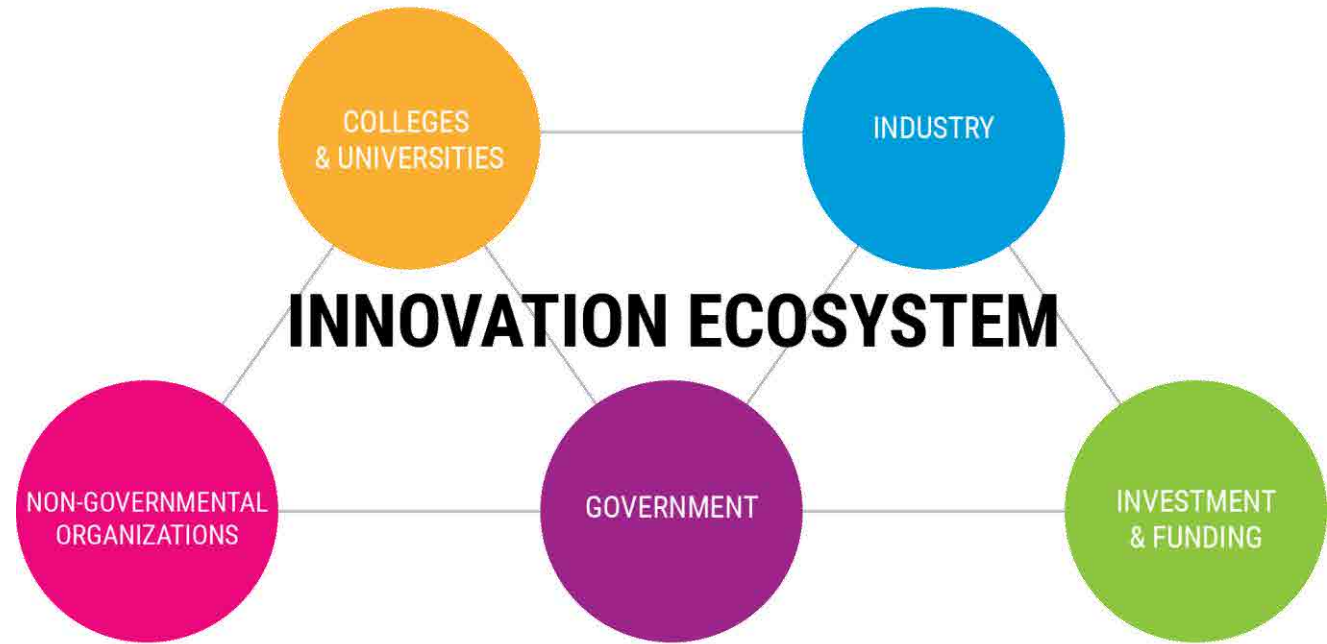
However, future growth, which should be higher, sustained & more inclusive, will require:

a. Diversifying the economy...

b. Building stronger **innovation** ecosystems...

...but in a rapidly advancing & connected global tech world – that is moving towards industry 4.0

Stronger collaboration and partnership between industry and academic institutions of higher learning is necessary for innovation in Africa.



Innovation thrives in a supportive environment or ecosystem, with functional elements of financing, strong R&D tradition, enabling policies and education system that produces high quality human capital.

RSIF is a collaborative effort to address each of these elements in SSA by *building sustainable doctoral training, research and innovation ecosystem to develop transformative technologies in Africa for economic growth and development*

The **PASET** Regional Scholarship and Innovation Fund



An Africa-led initiative to bridge the skills gap in Applied Sciences, Engineering, & Technology

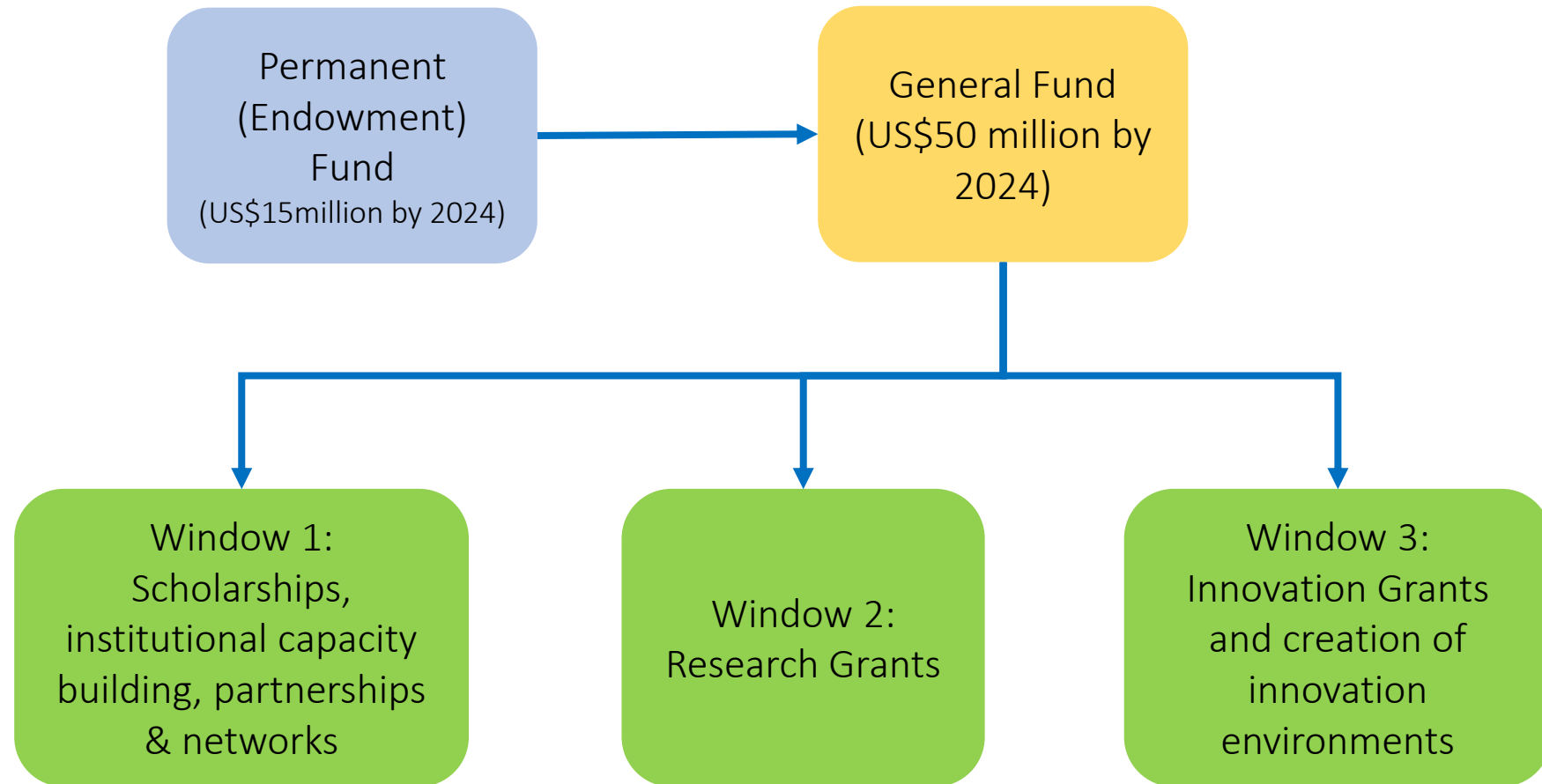


icipe: PASET RSIF's Regional Coordination Unit

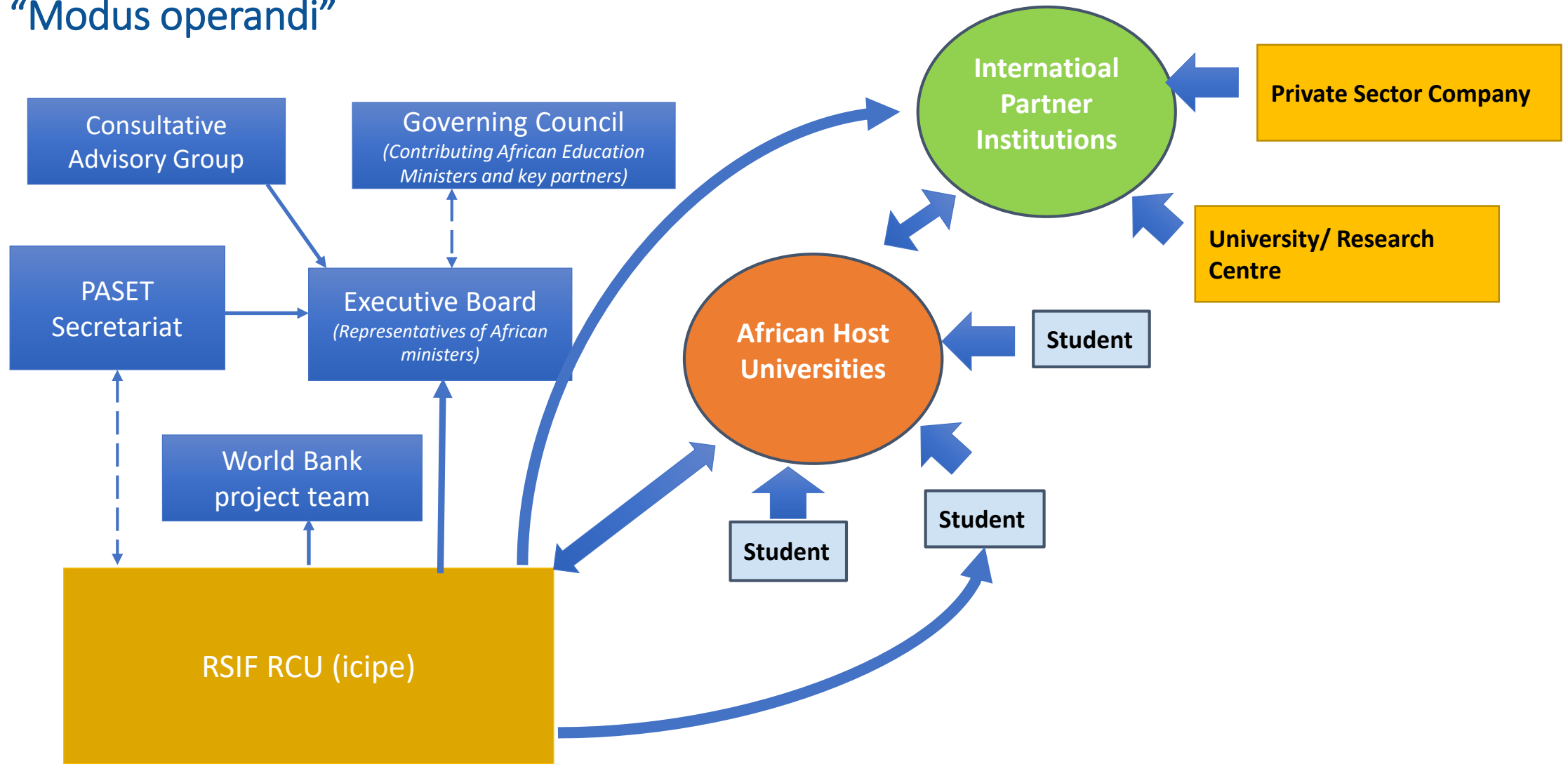
- RSIF RCU is *icipe* (since 1st Aug 2018)
- Building on *icipe*'s core capacity for innovation and capacity building
- Manage PhD training, research and innovation, institutional capacity building activities, help develop partnerships and networks
- Manage and grow the Permanent (Endowment) and General Funds



RSIF Design



RSIF “Modus operandi”



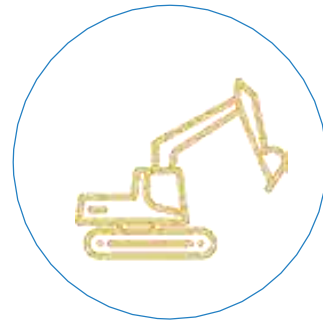
PASET-RSIF Priority Thematic Areas



ICTs including
big data &
artificial
intelligence



Food security &
agribusiness



Minerals, mining
& materials
engineering

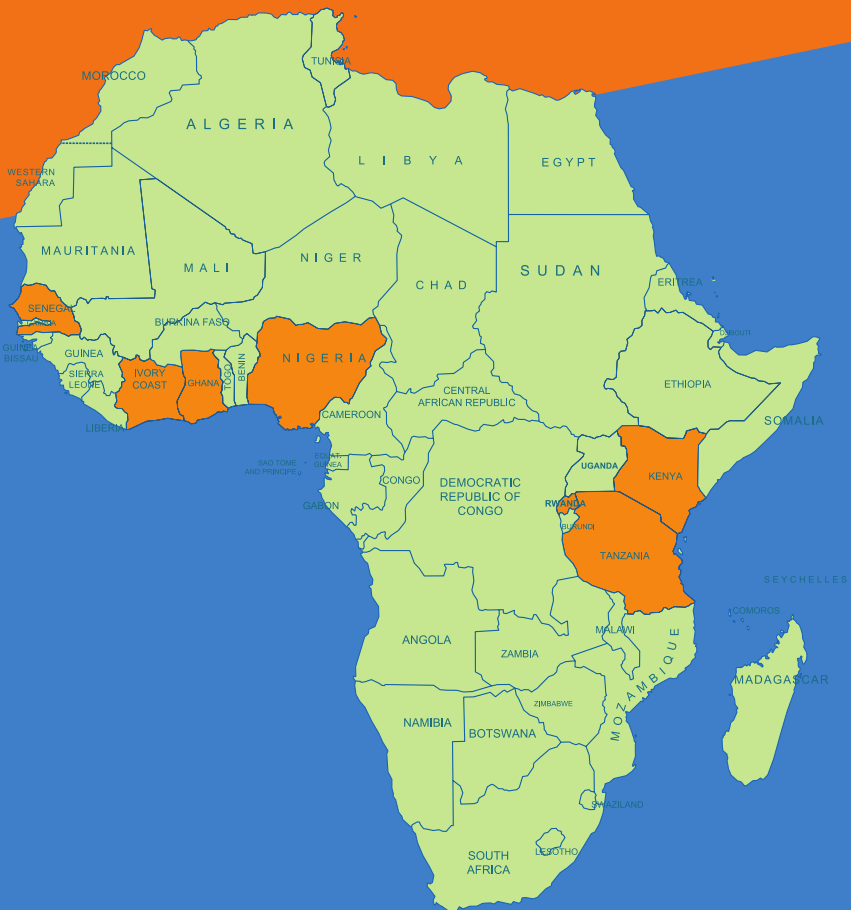


Energy
including
renewables



Climate change

PASET- RSIF Host Universities



ICTs including big data and artificial intelligence

UNIVERSITY OF RWANDA – RWANDA
Internet of Things: Embedded Computing Systems

UNIVERSITY OF GASTON BERGER – SENEGAL
Africa Center of Excellence for Mathematics, Informatics, and ICT



Minerals, mining and materials engineering

NELSON MANDELA AFRICAN INSTITUTION OF SCIENCE AND TECHNOLOGY (NM-AIST) – TANZANIA

Materials Science and Engineering

KENYATTA UNIVERSITY – KENYA
Materials Science and Engineering

AFRICAN UNIVERSITY OF SCIENCE & TECHNOLOGY – NIGERIA
Pan African Materials Institute (PAMI)



Food security and agribusiness

UNIVERSITY OF GHANA – GHANA
PhD. Applied Agricultural Economics and Policy/Agribusiness

SOKOINE UNIVERSITY OF AGRICULTURE – TANZANIA
Africa Center of Excellence for Infectious Diseases of Humans & Animals in Southern & Eastern Africa



Energy including renewables

UNIVERSITY OF PORT HARCOURT – NIGERIA
Petroleum and Gas Engineering / Energy Economics

UNIVERSITY OF NAIROBI – KENYA
Doctor of Philosophy in Physics



Climate change

BAYERO UNIVERSITY – NIGERIA
Natural Resource Management and Climate Change

UNIVERSITY OF FÉLIX HOUPHOUËT-BOIGNY – CÔTE D'IVOIRE
Africa Center of Excellence for Climate Change Biodiversity and Sustainable Agriculture

The **PASET** Regional Scholarship and Innovation Fund



PASET
Partnership for Skills in Applied Sciences, Engineering & Technology

An Africa-led initiative to bridge the skills gap in Applied Sciences, Engineering, & Technology

Regional Coordination Unit



RSIF PhD Sandwich Program

Year 1

African Host University (AHU)

Up to 1 year

- Admitted to an AHU PhD program
- Matching with suitable IPI supervisor completed early in program
- Student, with support from both supervisors, develops research proposal and plan for activities at AHU and IPI
- Student begins research as required
- Completes coursework as required by AHU
- Takes TOEFL exam if required by IPI

Years 2 & 3

International Partner Institution (IPI)

- **6 mths to 2 years** as a visiting scholar/ researcher
- Conducts major part of doctoral research
- Coursework as required by IPI
- Writes scientific papers

Year 4

African Host University (AHU)

1+ year

- Finalise research as necessary
- Writes scientific papers
- Complete thesis
- Thesis defence is heard by both parties from AHU and IPI
- Degree awarded by AHU
- Graduation

Joint supervision by African Host University and International Partner Institution supervisors

Window 2: Research Grants

Type 1 -Research Awards

1. Grant size: US\$ 90,000
2. No. to be awarded: 10
3. Duration: 3 yrs
4. Eligible: AHU Faculty involved in RSIF PhD Program.
5. Source of funds: Govt of Korea & World Bank (piloting)

Type 2 -Junior Investigator Res. Award

1. Grant size: US\$ 80,000
2. No. to be awarded: 16
3. Duration: 3 yrs
4. Eligible: RSIF PhD graduates who get postdoc or permanent position at university or research centre in SSA.
5. Source of funds: Govt of Korea

Window 3: Innovation Grants



Type 1 -Innovation Capacity Building

Grant size: US\$ 50,000

No. to be awarded: 6

Duration: 2 yrs

Eligible: AHU

Source of funds: World Bank (piloting)



Type 2 -Cooperability Grant

Grant size: US\$ 50,000

No. to be awarded: 5

Duration: 2 yrs

Eligible: Faculty of RSIF AHU involved in PhD training.

Source of funds: World Bank (Piloting)

Proposed areas of collaboration

Partnerships needed for innovation

- Partner with RSIF AHUs on innovation projects
- Participate in guest lectures on special topics on innovation and entrepreneurship
- Leverage RSIF's Competitive Grants System for generation of innovations relevant to African context in your industry

Proposed areas of collaboration

Partnerships for research and development

- Joint research projects with AHUs on development needs and priorities of SSA
- Builder longer term research partnerships with RSIF AHUs through contract research, prototyping, testing, Quality Control etc



Proposed areas of collaboration

Capacity Building of PhD Programs

- Work with RSIF AHUs to improve quality of PhD programs in SSA
- Host PhD students for internship opportunities for 6 months - 2 years as an international partner
- Support the award of more scholarships

Why RSIF?

Leveraging RSIF geographical presence in African countries as an entry point for expansion of business operations to Africa

Increased brand awareness among African countries especially the RSIF contributing countries

Better understanding of the African market to inform business decisions and enhance competitiveness

Why RSIF?

Access to highly skilled workforce

Benefit from innovation funding to test and bring commercially viable transformative technologies to scale

Access to knowledge sharing events and social recognition for contributing to SDGs

How do we formalize the partnership?

Partner expresses interest to engage in RSIF partnership.
Or PASET/African Host University nominates a partner

RSIF-RCU* (icipe) holds discussions with international institution. Signing of MoU between Partner and PASET.

International Institution holds discussions with African Host Universities to determine which ones it can support

Partner Institution signs a Partnership Agreement with one or more African Host University and RSIF-RCU (icipe)

Conclusion

- Partnerships for innovation are absolutely necessary for the growth and development of Africa.
- RSIF is seeking partners co-create with and commercialise innovative ideas and technologies.



Together we can do more!!



The **PASET** Regional Scholarship
and Innovation Fund



PASET
Partnership for Skills
in Applied Sciences,
Engineering & Technology

An Africa-led initiative to bridge the skills gap in Applied Sciences, Engineering, & Technology

Regional Coordination Unit



Thank you

The **PASET** Regional Scholarship
and Innovation Fund



PASET
Partnership for Skills
in Applied Sciences,
Engineering & Technology

An Africa-led initiative to bridge the skills gap in Applied Sciences, Engineering, & Technology

Regional Coordination Unit



For more information contact

Regional Coordination Unit

Regional Scholarship and Innovation Fund

International Centre of Physiology and
Ecology (*icipe*)

P.O. Box 30772-00100, Nairobi, Kenya

Tel +254 (20) 8632000

Website: www.rsif-paset.org



dg@icipe.org, icipe@icipe.org,
rsif@icipe.org



facebook.com/TheRSIF



@pasetrsif



linkedin.com/in/PASET-RSIF/