The PASET Regional Scholarship and Innovation Fund (RSIF)

Africa - Japan University Partnerships

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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

icipe@50 1970 – 2020 Insects for Life

General facts - *icipe*

- A *Center of Excellence* in Africa- for research and capacity building for insect science and its application
- An *intergovernmental organization*- Charter signed by 13 countries worldwide
- >500 staff (39 nationalities) and several contracted workers
- 150-180 graduate students annually

icipe's Mission: *To help alleviate poverty, ensure food security and improve the overall health status of peoples of the tropics by developing and extending management tools and strategies for harmful and useful arthropods, while preserving the natural resource base through research and capacity building.*

Organization with a *unique* history: ~ 50 years

T.R. Odhiambo

H.R. Herren

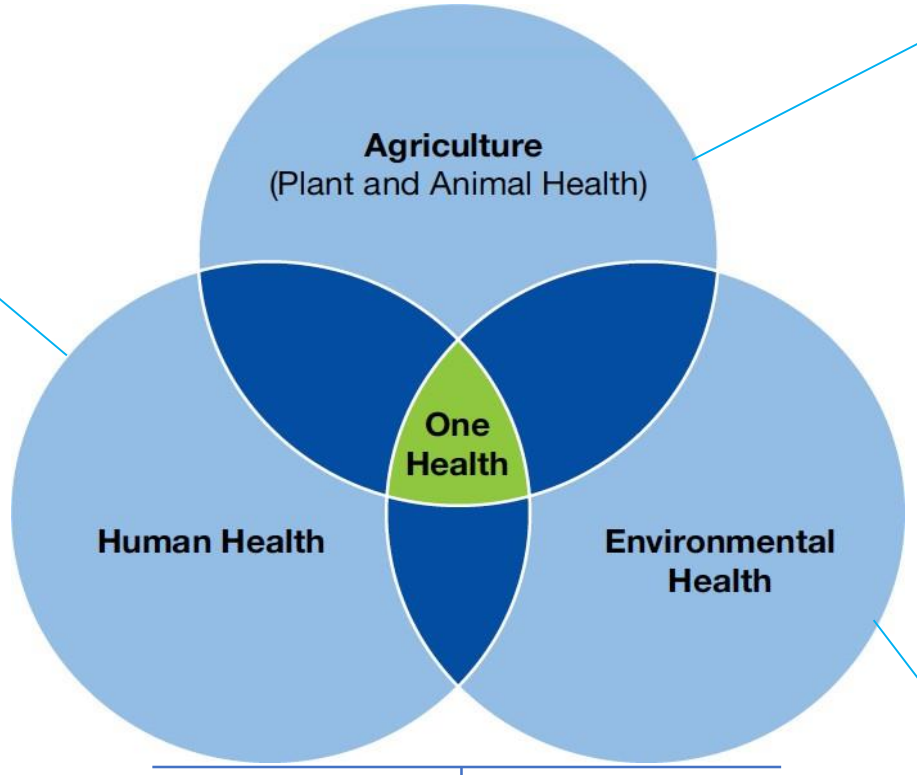
C. Borgemeister

S. Kelemu

How we work:

Human Health

- Malaria research
- Leishmaniasis
- Zoonotic diseases
- Sleeping sickness



Plant & Animal Health

Plant

- Staple foods
- Horticultural crops
- Migrant pests
- *Insects for food and feed*

Animal

- Tsetse
- Ticks
- Biting flies

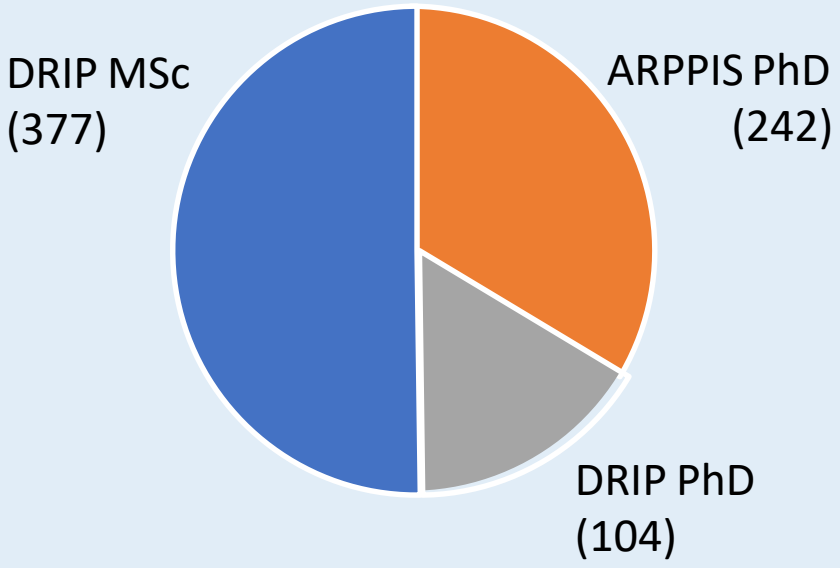
Environment Health

- Biodiversity and conservation
- Bee health
- Commercial insects and applied bio-prospecting
- Climate change

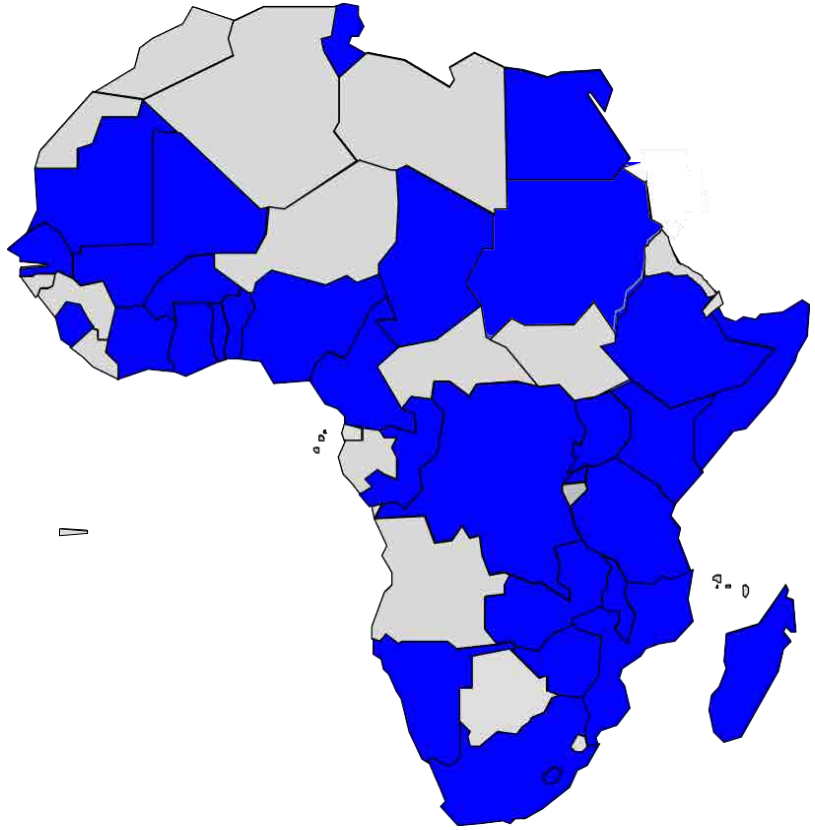
Capacity Building & Institutional Development

Postgraduate training (1983- present)

377 MSc and **346 PhD** postgraduate students have completed



Students from **33 African countries**



- 43% of PG Students women (up from 23% in the 80s)
- 75% of ARPPIS PhD alumni remain in Africa
- Publish in high quality journals; awards and achievements
- Contextually relevant, state of the art training courses

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

Prof. Goolam Mohamedbhai (Chair, PASET CAG), Dr. Sajitha Bashir (WB), Dr. Segenet Kelemu (DG, *icipe*), and Dr. Javier Botero Alvarez (WB) at signing of the Financing Agreement for the World Bank grant to *icipe* for the RSIF at **PASET Executive Board and Consultative Advisory Group Meeting, 1st Aug 2018, Abidjan, Cote d'Ivoire**

PASET Regional Scholarship Innovation Fund launched in 2015

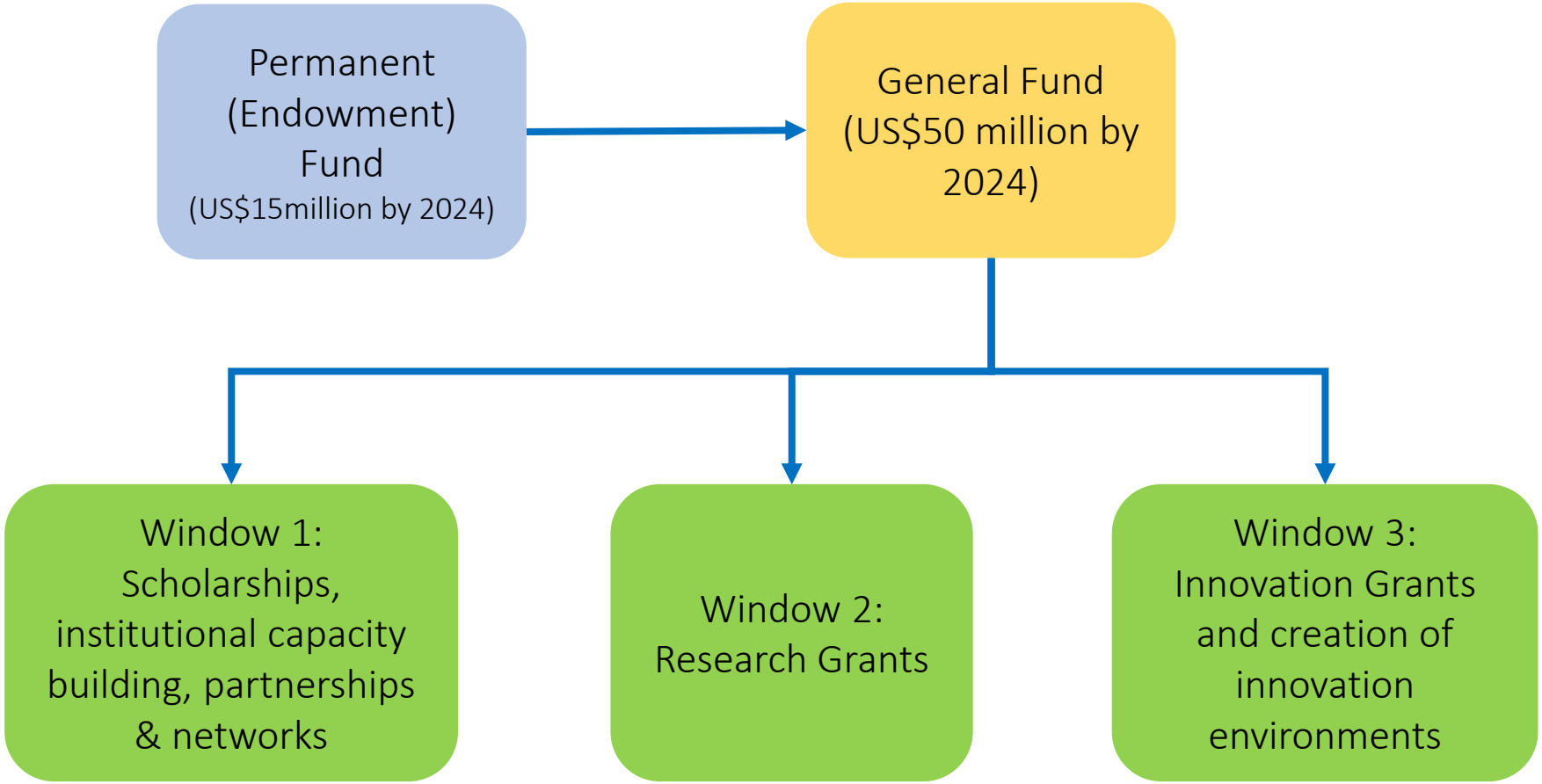
to *build sustainable doctoral training, research and innovation ecosystems* to develop *transformative technologies* in Africa for economic growth and development

RSIF Objectives:

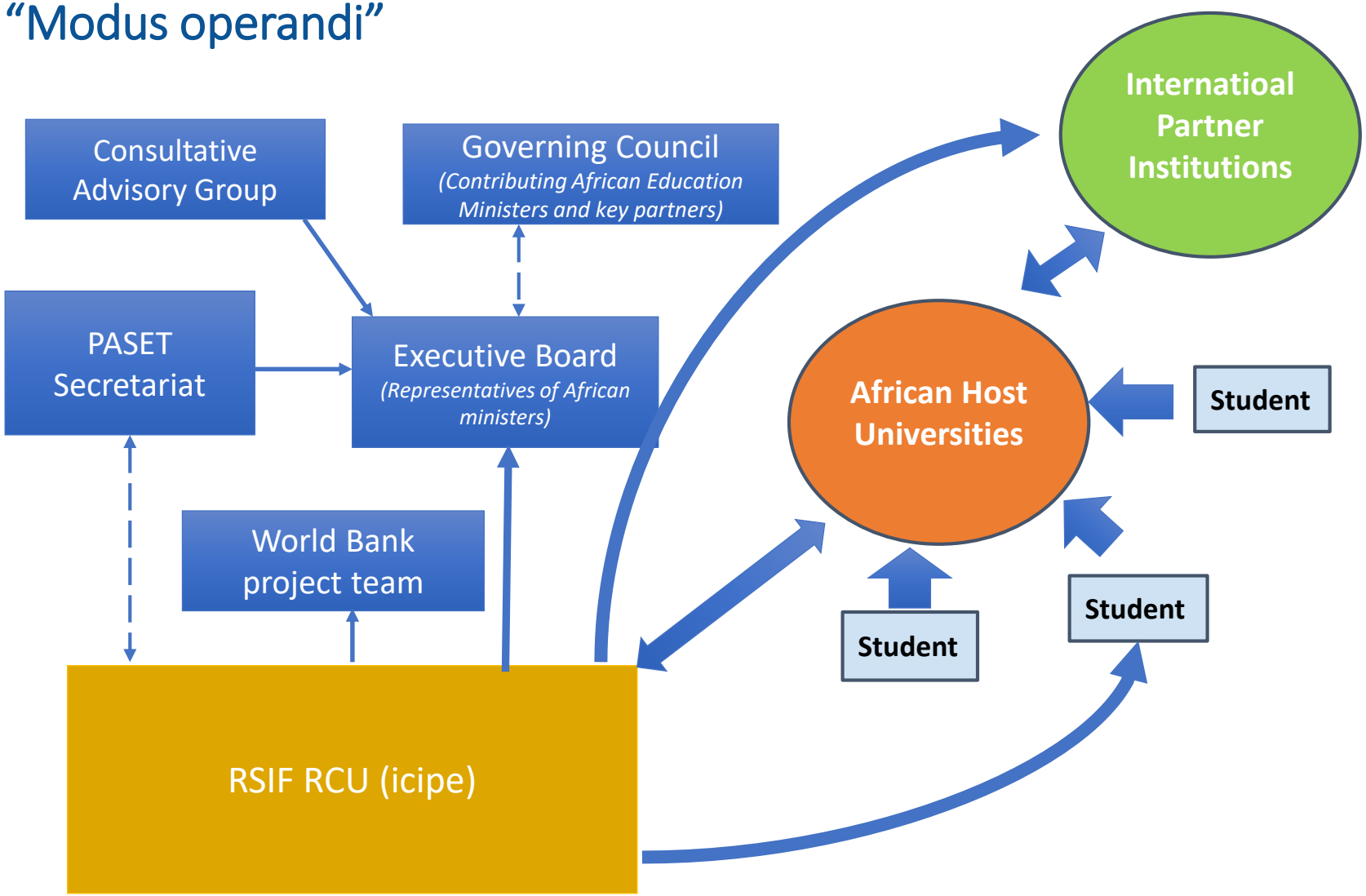
1. Create a stock of **highly skilled scientists, professionals and innovators in ASET areas**.
2. Identify and **nurture young talented Africans** to further their studies in ASET fields where expertise needed most
3. **Address imbalances in the number of women** and **disadvantaged groups** in ASET fields in Africa
4. **Build African university capacity to provide relevant ASET training** and to ensure continued investment in scaling up ASET education and workforce

The launch was led by HE President Macky Sall of Senegal along with representatives of the heads of states in Ethiopia and Rwanda

RSIF Design


Permanent (Endowment) Fund
(US$15million by 2024)
General Fund (US$50 million by 2024)
Window 1: Scholarships, institutional capacity building, partnerships & networks
Window 2: Research Grants
Window 3: Innovation Grants and creation of innovation environments

RSIF "Modus operandi"



PASET-RSIF African Host Universities (AHUs)

- PhD program in one of the Priority Thematic Areas
- Selected to establish international-quality PhD training, research and innovation
- Benefit from institutional capacity building opportunities through RSIF
- Develop partnerships with world-class institutions, universities and private sector globally and in Africa

ICTs including big data and artificial intelligence

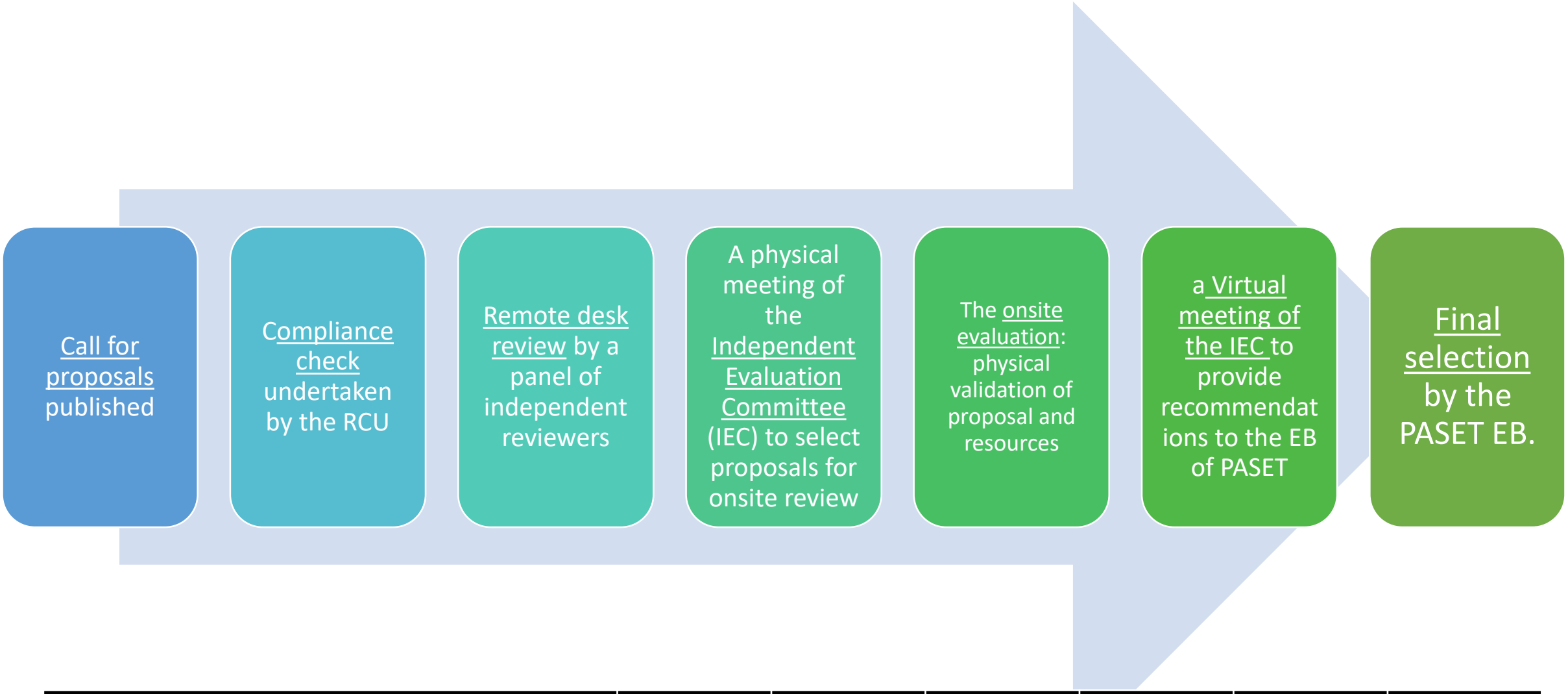
Food security and agribusiness

Minerals, mining and materials engineering

Energy including renewables

Climate change

Rigorous, competitive selection of host universities



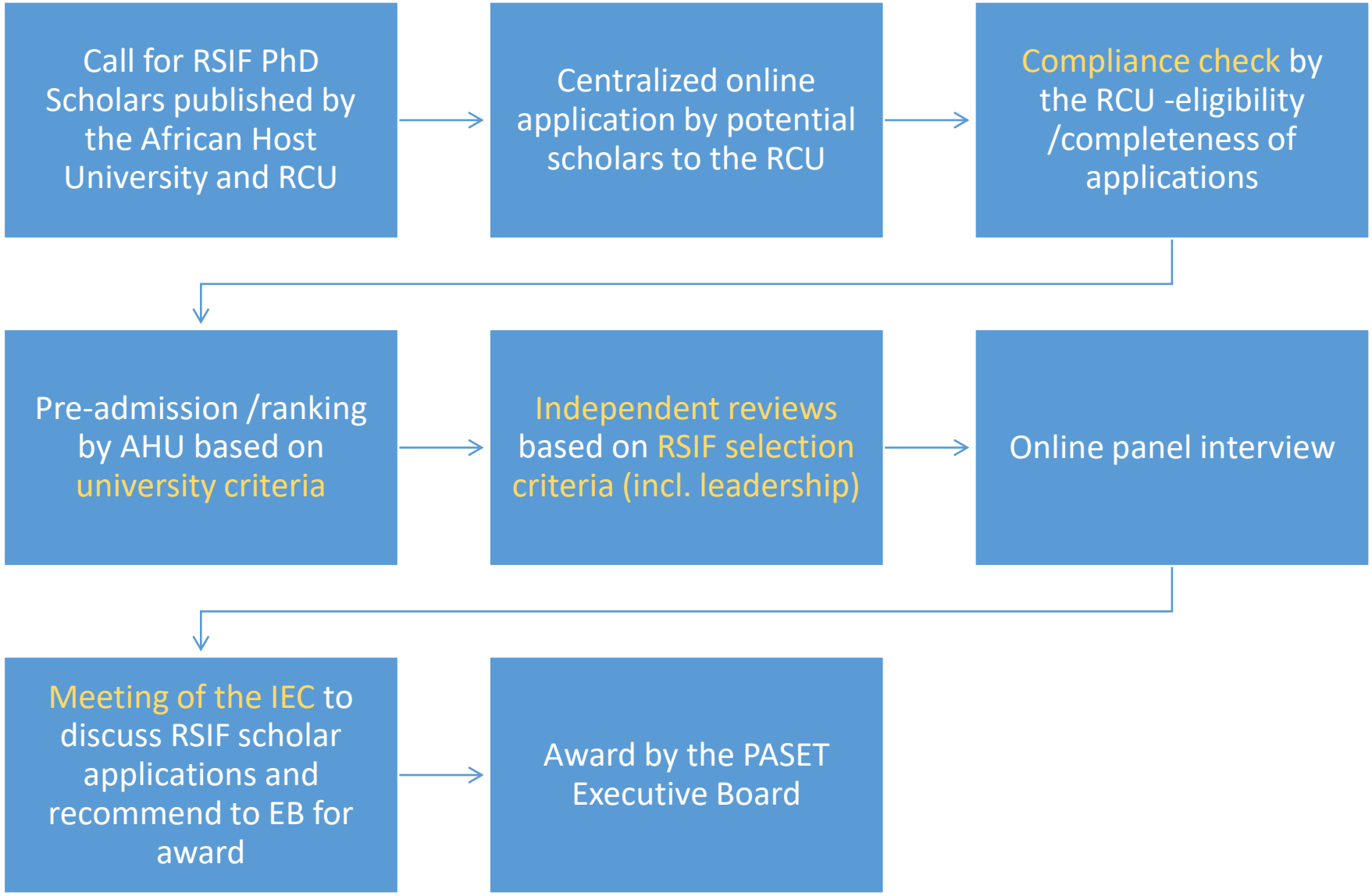
Priority Area*	CC	E	FS	ICT	MMME	Total
No. of eligible submitted proposals	13	17	24	14	12	80
No. of reviewers	3	3	3	3	3	15

RSIF Host Universities

No.	UNIVERSITY	COUNTRY	THEME
1	Nelson Mandela African Institution of Science and Technology	Tanzania	Mines, Minerals and Materials Engineering
2	Kenyatta University	Kenya	
3	African University of Science and Technology*	Nigeria	
4	University of Ghana	Ghana	Food Security
5	Sokoine University of Agriculture*	Tanzania	
6	University of Port Harcourt	Nigeria	Energy
7	University of Nairobi	Kenya	
8	University of Rwanda	Rwanda	ICT
9	University of Gaston Berger*	Senegal	
10	Bayero University	Nigeria	Climate Change
11	Université Félix Houphouët-Boigny*	Côte d'Ivoire	

*RSIF Host Universities selected in 2017

RSIF Student Selection Process



- Cohort 1: 15 students selected from 1030 students
- Cohort 2: 45 students to be selected from 1752 applications
- Cohort 3: > 40 students to be selected. Advert to be circulated in January, 2020

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

Matching of first cohort of RSIF Scholars

NO.	STUDENT NAME	COUNTRY	GENDER	PRIORITY THEMATIC AREA	PARTNER	ETA /IPI
1	Sylvia Wairimu Maina	Kenyan	Female	Food security and Agribusiness	KIST	20th August 2019
2	Maxwell Wambua Waema	Kenyan	Male	Food security and Agribusiness	KIST	20th August 2019
3	Humphrey Andalo Mabwi	Kenyan	Male	Food security and Agribusiness	KIST	20th August 2019
4	Emmanuel George Kifaro	Tanzania	Male	Food security and Agribusiness	KIST	20th August 2019
5	Gahamanyi Noel	Rwanda	Male	Food security and Agribusiness	KIST	27th October 2019
6	Frejus Ariel Kpedetin Sodedji	Benin	Male	Climate Change	KIST	20th January 2020
7	Richard Koech Kipyegon	Kenya	Male	Mines, Minerals, Mat Sci	WPI	1 October 2019
8	Jeanne Pauline Munganyinka	Rwanda	Female	Mines, Minerals, Mat Sci	WPI	1 October 2019
9	Jean Baptiste Habinshuti	Rwanda	Male	Mines, Minerals, Mat Sci	WPI	1 October 2019
10	David Oluwasegun Afolayan	Nigeria	Male	Mines, Minerals, Mat Sci	WPI	1 October 2019
11	Emmanuel Effah	Ghana	Male	ICTs	WPI	1 October 2019
12	Fatoumata Thiam	Senegal	Female	ICTs	WPI	Discussions ongoing
13	Traore Abdoulaye	Côte d'Ivoire	Male	ICTs	TBD	Discussions ongoing
14	Jean Nepomuscene Hakizimana	Rwanda	Male	Food security and Agribusiness	TBD	Developing workplan
15	Levi Omache	Kenyan	Male	Food security and Agribusiness	TBD	Discussions ongoing

*KIST= Korea Institute of Science and Technology; WPI=Worcester Polytechnic Institute

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)

Clear transition to employment

Careful selection of students with focus on young faculty and women

Provision of research grants to enable re-entry and to initiate research careers at home institution

Pairing with mentor at advanced research institution and/or diaspora

Capacity building for entrepreneurship skills/ proposal writing etc

Grants for commercialization and internships with the private sector

PhD training and topics in alignment to home institutions' needs

Contributions to RSIF- flexible mechanism for pooling funds

Item	Contributors	Funds (USD 'mill)	June 2019 (USD mill)	June 2020 (USD mill)	June 2021 (USD mill)	June 2024 (USD mill)
A. Permanent Fund	-	-	-	2	5	15
B. General Fund	Other country funding	09	14	18	25	50
	Kenya	02				
	Rwanda	02				
	Côte d`Ivoire	01				
TOTAL	-	**14**	**14**	**20**	**30**	**65**
RSIF System establishment & design	World Bank	15	15	-	-	WB Review
	Partners	0.2	0.2	0.4	0.8	2

Partnership with Japan

- Thank Japan for support to Africa through various initiatives including SATREPs, ABE and other initiatives
- Request for greater partnership with universities and research institutions for joint research, training and innovation
- Support to research (including Post-doc research) in Africa
- Sharing experience in moving research to application such as “blue LED”
- PASET an important mechanism for long term benefits to both Japan and Africa

Why PASET and its RSIF?

1. Access a well managed continental African led platform (PASET RSIF) for strengthening STI cooperation between Japan and Africa
2. Access exceptional PhD scholars from all over Africa
3. Build lasting partnerships with best quality universities across Africa and collaboratively expand research impact
4. Contribute to building the next generation of African scientists and innovators and link to ABE platform
5. Increase capacity of your research community and institution by hosting exceptional PhD scholars from across sub-Saharan Africa
6. Expand your global network by collaborating with a growing system of African scholars and institutions within and beyond RSIF
7. Broaden and deepen knowledge generated (including publications) in your institution through incorporation of novel research topics being undertaken by emerging African scholars

https://pngtree.com/free-icons/cooperation

Acknowledgement

Donors directly providing financial support to *icipe*

For more information contact

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Regional Coordination Unit