



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

Africa Regional Scholarship and Innovation Fund for Applied Sciences, Engineering and Technology

Progress Report to the PASET EB October – December 2020

Executive Summary

Initiated and owned by African governments, the Regional Scholarship and Innovation Fund (RSIF) aims to build a critical mass of skills and knowledge needed to increase the use of science, technology, and innovation for sustainable economic growth in sub-Saharan Africa (SSA). This Report provides key program achievements for the period 1 October - 31 December 2020. The following are highlights during the period:

- a) Following the signing of subsidiary agreements (SAs) with the governments of **Burkina Faso, Ghana and Senegal**, work plans for the first six-month period were submitted and the first instalment of funds have been received, with exception of Ghana, which is now being processed.
- b) Subsidiary agreements between *icipe* and **Benin, Mozambique, and Nigeria** have been prepared and are at different stages of endorsement for the three countries to contribute to RSIF and join PASET.
- c) The *icipe*-RSIF proposal to the **European Union funded African Caribbean and Pacific (ACP) Innovation Fund was selected** for funding and its implementation will begin on 1 February 2021. The proposal will extend RSIF's windows 2&3 work in West Africa with a focus on digital innovation. Partners include Agropolis Foundation in France, and Gearbox Pan Africa Network Limited. The total project amount is EUR 4.9 million with an 85% contribution from the EU of EUR 4.2 million for four years.
- d) icipe, with input from Lion's Head Global Partners, the firm commissioned to undertake the feasibility study for RSIF's Permanent Fund, prepared the RSIF fundraising strategy and an implementation plan for the establishment of the Fund. The RSIF Permanent Fund establishment will be initiated in the next period.
- e) icipe published a Call for proposals for the selection of four additional African Host Universities (AHUs) to offer PhD programs in the PASET priority thematic areas, to create sufficient capacity for the rapidly expanding numbers of RSIF PhD students. A total of 25 eligible applications were received and review is on-going. It is expected that the selection of new PhD programs will be completed by 30 March, 2021.
- f) icipe has prepared guidelines on Intellectual Property (IP) management for research activities conducted by RSIF scholars and for supported research and innovation grants. The IP guidelines provide guidance on key issues including ownership of background and foreground IP, protection, dissemination and use of foreground IP, patent applications, publications, access rights and commercialization of IP generated from collaborative research and innovation activities.
- g) Scholars are performing well academically and have remained motivated despite the COVID-19 challenges. All 15 **Cohort 1 scholars** are now matched to International Partner Institutes (IPIs). **Cohort 2 scholars** are at various stages of reporting to the host universities to start their PhD studies. For the selection of **Cohort 3 scholars**, *icipe* published the call on 30 April 2020 with a deadline of 22 June 2020. A total of 2,202 (378 women/ 857 faculty) were received, representing 40 African countries.
- h) **RSIF's visibility and engagement** continues to grow. There has been extensive coverage of RSIF activities resulting from strategic campaigns. *icipe* has produced 30 issues of the RSIF weekly newsletter to date with over 6000 subscribers. RSIF Tweet impressions have now surpassed 100,000 up to 30,189 in Oct-Dec quarter (up from 27,983 in the period from July- to September). A social media strategy has been prepared to complement the overall communication strategy.
- i) The key challenge during the period has been the impact of COVID-19 on the program. To enable African Host Universities (AHUs) and scholars to overcome key challenges related to the COVID-19 pandemic, RSIF has provided a range of support, including facilitation to enable increased access and use of online resources and tools.

Summary of Request to the EB in this report

(1.1.2) Permanent Fund design (page 4)

- Establish a sub-committee to guide the Permanent Fund establishment process.
- Champion selected actions to mobilise funding for RSIF's endowment.

(2.1.3) Selection of Cohort 3 of PhD Scholars (page 7)

- Note the new timetable for the Cohort 3 recruitment (Revised Timeline 2)

(2.2.1) Implementation status of Research Grants (Window 2, Type 1) (page 7)

 Note the progress in implementation of RSIF PhD scholars and the Research and Innovation grants

(3.2) RSIF communications (page 8)

- Note progress on communications and other areas and the prioritization of the communications function during the next period in response to EB request.

1.0 Introduction

The Regional Scholarship and Innovation Fund (RSIF) aims to build a critical mass of skills and knowledge needed to increase the use of science, technology, and innovation for sustainable economic growth in sub-Saharan Africa (SSA). This Report provides a summary of progress in the implementation of the RSIF Program for the period **1 October 2020 – 31 December 2020**. The report presentation is arranged in the two RSIF program component areas: viz, Component 1: *Capacity Development for Operation of the Scholarship, Research, and Innovation Fund*; and Component 2: *PhD Scholarships, research grants and innovation grants*.

A. Component 1: Capacity Development for Operation of the Scholarship, Research, and Innovation Fund

1.1 Capacity building for management of the RSIF General Fund and setting up the RSIF Permanent Fund:

The sub-component aims to strengthen the capacity of *icipe* as the RSIF Regional Coordination Unit (RCU) to engage in innovative fundraising strategies to reach funding partners relevant to the Fund and to design and operationalise the RSIF Permanent (Endowment) Fund. Key activities are described as part of resource mobilisation and establishment of the RSIF Permanent Fund.

1.1.1 Resource mobilization

- a) African countries are at various stages of contributing to RSIF. The first instalments of funds were received this quarter from Burkina Faso and Senegal and that from Ghana is in the final stages.
- b) Several new contributors to RSIF are expected:
 - i. (Benin) The agreement between *icipe* and the Government of Benin (USD 2 million) has been signed by *icipe* and is being counter-signed by Benin.
 - ii. (Mozambique) A draft agreement has been prepared for the contribution of USD 6 million from the Government of Mozambique with signing expected in the first quarter of 2021.
 - iii. (Nigeria) A draft agreement with the Government of Nigeria (USD 4 million) is awaiting approval from the Government of Nigeria.
- c) icipe continued to reach out to other African countries and potential partners, including by providing documentation on RSIF and its benefits to investors/contributors. These include Uganda, Malawi, Tanzania among others. Please see the list here. The RSIF brochure was also updated and shared with partners.
- d) The *icipe*-RSIF proposal to the European Union ACP Innovation Fund was formally awarded for funding¹. This new grant will extend RSIF's windows 2 and 3 work in West Africa with a focus on digital innovation. Partners include Agropolis Foundation in France, University Abomey-Calavi, Benin, and Gearbox Pan Africa Network Limited, Kenya. The total project amount is EUR 4.9 million with an 85% contribution from the EU (EUR 4.2million) for four years commencing 1 February 2021.
- e) *icipe* responded to a competitive call for proposals from the International Development Research Centre (IDRC) and the Swedish International Development Agency (Sida) to manage the Africa Artificial Intelligence for Development (AI4D) Scholarships Program. If approved, this would support RSIF's work in the ICT, including Big Data and Artificial Intelligence thematic area, with up to USD 3 million for PhD training and to strengthen research and innovation in African public universities.
- f) Following RSIF's private sector outreach, an agreement was reached with Nestlé to host, initially two, PhD students for research internships.

¹ https://www.rsif-paset.org/icipe-led-consortium-wins-funding-to-unlock-the-transformative-potential-of-digital-technologies/

1.1.2 Permanent Fund design

The feasibility study report for the establishment of the RSIF Permanent Fund was presented to the PASET Governing Council on 26 October 2020 and approved. An implementation plan for the establishment has now been finalized following input from the PASET Consultative Advisory Group on 8 December 2020, the PASET EB and the World Bank. The implementation plan has segregated activities into two broad categories of i) Pre-Establishment Phase (activities to be done prior to legal registration and establishment of the RSIF Permanent Board of Directors) and ii) Establishment & Operationalization Phase (activities following the appointment of BoD). The feasibility study recognizes the need for fundraising to be led by African Governments.

Request to the EB:

- Establish a sub-committee to guide the Permanent Fund establishment process.
- Champion selected actions to mobilise funding for RSIF's endowment.

1.2 Capacity development for the operation and management of doctoral training scholarships in selected AHUs

1.2.1 Selection of additional RSIF African Host Universities (AHUs)

A call for additional four PhD programmes to host RSIF PhD students at African universities was published and disseminated to existing AHUs and to ACEs in the four relevant RSIF themes, based on guidance from the EB. The call was open between 25 September to 23 November 2020. A total of 25 eligible applications were received, with nine for the energy including renewables theme, eight in food security and agribusiness, five in climate change and three in ICT. Most applications were from universities in anglophone countries (16) and the remaining nine from Francophone countries. Seven of the applications were from existing AHUs while 18 were from new universities. It is expected that the selection of new PhD programs will be completed by 30 March 2021. The timeline for the selection of AHUs is provided as Table 1 below.

Table 1	Timeline	for the	selection	of AHUS
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	Activity	Timeline	
1	Independent Reviews: technical evaluation of applications by thematic	8 March 2021	
	area experts (IRC desk reviews)		
2	IRC meetings to confirm evaluation scores	17 March 2021	
3	Virtual meeting of IEC to shortlist applications for validation	23 March 2021	
	(Independent Review Committee meetings)		
4	Validation of shortlisted applications (on-site/virtual evaluation)	9 April 2021	
5	Virtual meeting of the IEC to make the final selection of PhD	16 April 2021	
	programs/African Host Universities		
6	EB approval	30 April 2021	
7	Negotiations and signing of agreements between AHUs and icipe	14 May 2021	

1.2.2 Information Communications and Technology

Procurement, delivery, and installation of the *icipe* video conferencing equipment have been completed. Purchase of video conferencing equipment for host universities is now underway. Contracts have been awarded and awaiting item delivery to the specific AHUs.

The award of the development of a Management Information System (MIS) for RSIF to support the automation of the scholarship and innovation components of the program has been finalised to CoreTech Ltd and the contract signed. CoreTech will initiate work in early 2021.

During the period, the E-Systems for RSIF were improved to enhance data capture for the AHU application; reimbursement reports and receipts submission and poster/presentation and invoice submission. The ongoing RSIF ICT ecosystem components being developed are:

- RSIF website revamp is complete and is now live (<u>www.rsif-paset.org</u>). The website is undergoing continuous content update;
- RSIF repository and knowledge hub is up and running with continuous updates; and
- The implementation of Enterprise Resource Planning continues.

1.3 Capacity development for improving the quality of PhD programs and research in ASET fields

1.3.1 Capacity Building Strategy and Implementation

Cross-cutting training courses

icipe has continued with the implementation of the Capacity Building Strategy to enhance the quality of PhD training at AHUs. During the reporting period, three cross-cutting courses were held for scholars through video conferencing on technical monitoring and evaluation (23-24 September 2020, with 89 registered participants 82 of which were RSIF scholars and seven from other institutions) science communications (12-13 November 2020, with 114 registered participants, 65 of which were RSIF scholars, and 49 from other institutions) and on research methods, data management and analysis (16-19 November 2020, with 79 registered participants, 55 of which were RSIF scholars, and 24 from other institutions).

RSIF Guest Webinar Series

Three monthly guest webinars were held during the reporting period:

- (1) Prof. Junseok Hwang (ICT professor, Seoul National University, Korea) on the future of higher education in science & technology held on 29 October 2020.
- (2) Prof. Malik Maaza (iThemba LABS-National Research Foundation, and University of South Africa) on Nanosciences/ Nanotechnologies & Biomimicking held on 25 November 2020.
- (3) Dr Julius Ecuru (Manager BioInnovate Africa) on how to increase the value of intellectual assets in an academic setting on 16 December 2020.

RSIF Student Webinar Series

RSIF monthly seminar series offers RSIF scholars the opportunity to present their research work to an audience of RSIF scholars and AHU faculty. Three seminars took place during the reporting period (7 October, 4 November & 2 December 2020). An average of 54 RSIF Scholars attended each seminar.

1.3.2 Increased access to subscribed e-resources for AHU libraries

AHU libraries, in consultation with the RSIF coordinators at the AHUs, have identified e-resources (e-book and e-journal collections) to subscribe to for 2021 and 2022. The AHUs have negotiated subscription fees with the publishers, and each have received invoices for the e-resources. In total, the AHUs will gain access to 39,574 e-books and 3526 e-journals. *icipe* shall now proceed to amend the *icipe*-AHU agreements to allow for the transfer of funds to the AHUs to pay for the e-resource subscriptions.

1.3.3 Development of a Research and Innovation Strategy for RSIF

Progress has been made in the development of the RSIF Research and Innovation Strategy. The Strategy will guide RSIF research activities and ensure both alignments with country development strategies as well as impact. A review of policy documents has now been completed, following initial consultations with key stakeholders during the previous period. The draft strategy will be completed during the first quarter of 2021.

1.4 Capacity development for the operation and management of innovation grants

1.4.1 Implementation Status of RSIF Innovation Grants

During the quarter, *icipe* advanced in the formal contracting of the Innovation Grant projects approved for award by the PASET EB. Project Grant Agreements were concluded for most projects with funds amounting to USD 150,184 transferred to five of the six projects awarded for implementation under the Institutional Innovation Capacity Building Program Grants (ICBP, Innovation Type 1). Project agreements for one ICBP project and two Cooperability projects (Innovation Type 2) will be concluded in January 2021 (See here for details of all research and innovation projects).

1.4.2 Grantees Technical Assistance Implementation Plan

As part of implementing the Grantees Technical Assistance Implementation Plan, *icipe* organized a Grants Management Orientation Training for all grantees of research and innovation grants. A total of 43 participants attended, 14 of which were women. The 3-day training was held 17-19 November 2020 with the aim of equipping the grant Project Leaders and AHU finance administrators with best practices for grants management, including RSIF financial and technical reporting and compliance requirements for successful project implementation.

1.4.3 Development of Intellectual Property (IP) Manual for RSIF

The RSIF guidelines on the Intellectual Property (IP) management to guide research and innovation activities for the RSIF program were finalised during the period. The <u>manual</u> covers the management of foreground and background IP, access rights, cost of Intellectual Property Right (IPR) protection, dissemination and management, among others.

B. Component 2: PhD Scholarships, Research Grants and Innovation Grants

2.1 Training of doctoral Students

2.1.1 Status of Cohort 1 RSIF PhD Scholars

Scholars continue to make progress towards the completion of key research and training objectives, despite the Covid-19 context and related challenges. Three additional papers have been published by scholars in peer reviewed publications (<u>Gahamanyi Noel</u>, lead author in collaboration with joint supervisory team at KIST and SUA, <u>Jean Hakazimana</u> and <u>Richard Koech</u>. Please click scholars' name for the publications). Students at WPI are expected to complete their placements in October 2021 (they are tested weekly for COVID-19 to receive full access to laboratories). Please click <u>here</u> for the status of students.

2.1.2 Current Status of the Cohort 2 RSIF PhD Scholars

Table 2: Snapshot of Cohort 2 students and method of study for the period of Oct-Dec 2020

Status of student	# of students
Face-to- Face Instruction	44
Remote Instruction	23
Deferred Start Date (22 November 2020)	4
Total number of Students	67

There has been progress made towards matching Cohort 2 scholars with international partner institutions. As of 15 December 2020, six IPIs have shared RSIF scholars demand surveys and identified researchers with an expressed interest in jointly supervising Cohort 2 students. *icipe* has contacted the scholars and shared scholar profiles of the IPI supervisors that are interested in hosting them. Scholars are now at the discussion stage with primary supervisor at the AHU and awaiting collaborative discussions to plan towards the strategic placement of students. The status of the students is presented here. Matching will be largely concluded during the next reporting period.

2.1.3 Selection of Cohort 3 of PhD Scholars

icipe published the call for Cohort 3 RSIF PhD scholarships on 30 April, 2020 with a deadline of 22 June 2020. A total of 2,202 (378 women/ 857 faculty) applications were received, representing 40 African countries (The statistics of applications by country and gender can be viewed here). Due to delays in university level selection, an updated schedule is included in Table 3.

Table 3. Revised schedule for recruitment of Cohort 3 of RSIF PhD scholarships

	Activity	Timeline	Revised Timeline 1	Revised Timeline 2
1	Call for Applications open (complete)	30 Apr 20	30 Apr 2020	30 Apr 2020
2	Deadline for application submission (complete)	22 Jun 20	22 Jun 20	22 Jun 2020
3	Screening/completeness check by icipe (complete)	6 Jul 20	6 Jul 2020	6 Jul 2020
4	AHU shortlisting (complete)	28 Sept 20	15 Nov 2020	15 Nov 2020
5	Shortlisted candidates' one-way interview (complete)	9 Oct 20	10 Dec 2020	18 Jan 2021
6	Desk review and evaluation of applications by IRC	2 Nov 20	11 Jan 2020	8 Mar 2021
7	Evaluation by the Independent Evaluation Committee	23 Nov 20	18 Jan 2020	15 Mar 2021
8	Submission to EB for Award	18 Dec 20	25 Jan 2020	21 Mar 2021

Request to the EB: The EB is requested to note the new timetable for the Cohort 3 recruitment (Revised Timeline 2).

2.2 Research Grants

2.2.1 Implementation status of Research Grants (Window 2, Type 1)

During the period, *icipe* signed Project Agreements with respective AHUs for four of the six projects and subsequently disbursed funds amounting to USD 194,337 to facilitate project implementation. The remaining project disbursements will be done in the subsequent period. Please click <u>here</u> for full details. A second call is being prepared, building on lessons from the first call.

<u>Request to the EB:</u> The EB is requested to note the progress in implementation of RSIF PhD scholars and the Research and Innovation grants.

C. Crosscutting activities

3.1 RSIF response to COVID -19

To enable Africa Host Universities (AHUs) and scholars to overcome key challenges related to the COVID-19 pandemic, RSIF has provided a range of support. This included covering student's costs for COVID-19 testing and related expenses and arranging flexibility in dates for travel and reporting to AHUs and support for engagement with universities. For AHUs, RSIF is providing access to over 20,000 online resources including linking to new resources that have become freely available during the time of COVID-19. To enable better access, RSIF is in the process of purchasing a set of video conferencing facilities for each of the 11 AHUs.

3.2. RSIF communications

RSIF's visibility continues to grow. In the period, the RSIF Communications Strategy was developed and reviewed by all key stakeholders. The Strategy is being used to guide communications. There has been extensive coverage of RSIF activities resulting from strategic campaigns. There has also been consistent coverage in *icipe* publications, including the Centre's e-bulletins, which are circulated widely to all donors, collaborators, and the media. Other achievements include:

- The stories of three scholars (Fatoumata Thiam, Sylvia Wairimu Maina and Jeanne Pauline Munganyinka) on "Studying Abroad during the COVID-19 Pandemic: The Experiences of Three African Women PhD Students", were published in The ADVANCE Journal special issue on the impacts of COVID-19 on women in higher education, particularly women in STEM.
- In conjunction with the icipe@50 celebration, HE President Uhuru Kenyatta highlighted RSIF in his speech² and so did the *icipe* Director General, Segenet Kelemu. This was widely disseminated online and shared on RSIF platforms³. Brief RSIF student profiles are also available on the Youtube channels. Some RSIF banners and posters were updated.
- A social media strategy has been prepared to complement the overall communication strategy. A communications firm is being hired to facilitate implementation of the Strategy and a call for firms has been released with a deadline for 22 January 2021. Based on the World Bank procurement guidelines, we expect the firm to be recruited by early April 2021. The recruitment process for a new senior communications specialist was done in the period and the position will be filled during the next period. A communications intern has also joined to strengthen RSIF digital visibility.
- The upgraded RSIF website has been finalised and is now live at www.rsif-paset.org. Content migration has been done and is being updated. The RSIF weekly newsletter has had 30 issues to date with more than six thousand subscribers. RSIF Tweet impressions were 30,189 in Oct-Dec quarter (Currently there are 1109 and 693 people following the RSIF Facebook and Twitter accounts, respectively. Engagement on Facebook posts were 9.54% on average in the quarter October-December with a high of 26% for posts about RSIF Scholars arriving at their AHUs.
- *icipe* has developed country progress reports to share with each RSIF contributing government. These will also be made available on the RSIF website.

Request to the EB: The EB is requested to note progress on communications and other areas and the prioritization of the communications function during the next period in response to EB request.

² https://www.president.go.ke/2020/11/20/science-and-research-key-to-unlocking-kenyas-development-potential-president-kenyatta-says/

³ https://www.rsif-paset.org/president-kenyatta-calls-for-increased-investment-for-research-and-development-in-africa/

3.3 Monitoring and Evaluation

During this reporting period, the program monitoring and evaluation officer together with the capacity building team provided additional monitoring and evaluation training to research and innovation grants winners. The one-day training, held on the 19 November 2020, was aimed at providing RSIF grantees with best practices and tools for monitoring and reporting on the progress and performance of projects and to enhance their understanding of RSIF's monitoring, evaluation and reporting systems and policies. In addition, two semi-annual satisfaction surveys, targeting the AHU contact persons and the PhD students, were implemented using SurveyMonkey data collection tool. Data analysis and report writing commenced in December 2020. Project management has continued to track project progress against the set performance indicator targets. Information was collected to update the results framework during the sixth quarter.

3.4 Safeguards and RSIF Grievance Redress Mechanism (GRM)

icipe has made progress in developing and operationalisation of the RSIF Grievance Redress Mechanism (GRM). The following has been achieved to date:

- (1) Safeguarding training course held on 30 October 2020 for 18 GRM representatives/focal points from African Host Universities (African University of Science and Technology; Bayero University; Kenyatta University; Nelson Mandela African Institute of Science and Technology; University Felix Houphouet Boigny; University of Ghana; University of Nairobi) and *icipe*.
- (2) Draft RSIF GRM manual revised and updated.
- (3) Draft RSIF SGBV policy prepared and under review.

3.5 Internal Audit

The RSIF <u>internal audit</u> was undertaken by the *icipe* internal auditor and report prepared and shared with the World Bank. The audit aimed at assessing the design and operating effectiveness of the key internal controls relating to operations of RSIF, particularly the management of funds. The engagement concluded that controls were adequate except for the areas noted where improvements were ongoing. *icipe* continues to strengthen the internal processes of the program by updating the RSIF operational manual, partnership agreements and by implementing recommendations related to the internal audit review.

3.6 Procurement

Status of procurement as at December 2020 is provided here.

3.8 Key challenges during the period

- a) COVID-19: The key challenge continues to be the impact of COVID-19 on the program. Some students are experiencing delays in research progress due to lab closures and disruption to the global supply chain. Student travel to universities has also been delayed for some students, further slowing progress, for Cohort 2. Unfortunately, one Cohort 2 student was not able to travel after contracting COVID-19 and travel will be reviewed when she recovers. icipe is working closely with IPIs and students to mitigate further delays in research and overall graduation timeframe.
- b) **Civil conflict**: Haftu Mengesha (Ethiopia/ U-FHB) was expected to travel to Abidjan, Côte d'Ivoire on 14 November 2020. He was not able to leave Mekelle, the capital of the Tigray region in Ethiopia due to the civil conflict and resulting airport closures. He continues to engage by email, though sporadically. We hope that he will be able to travel soon when the conflict subsides.
- c) **Procurement**: The call for the external communications firm to support RSIF in communications did not identify the level of expertise needed to implement the RSIF Communications tasks. *icipe* has thus re-advertised the call, with the deadline date for the Request for Proposals on 3

March 2021. As per the World Bank procurement guidelines, this may be filled by April 2021 at the earliest.

3.9 Main activities for the next period

- a) Complete the feasibility study report on the establishment of the Permanent Fund and initiate its implementation
- b) Prepare and undertake RSIF Mid-Term Review
- c) Continue to implement the interim resource mobilization plan with emphasis on written and online engagement due to Covid-19
- d) Further advance in the selection of international partner organizations
- e) Finalise discussion of matching of students with partner institutions
- f) Organise postponed onboarding of second cohort of students in Covid-19 context
- g) Finalise third cohort of student selections
- h) Finalise selection of additional AHUs
- i) Develop online mechanism for supervision and mentorship of PhD students
- j) Enhance access to journals and databases for RSIF scholars
- k) Implement RSIF communication strategy, including hire of communications firm
- I) Finalize Grievance Redress Mechanism (GRM) and social risk management framework for the project.

4.0 RSIF Funds allocation Report - Government Contributions

The summary including the performance report can be found here.