

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

Progress Report 1 July– 31 December 2021

Executive Summary

Initiated and owned by African governments and implemented by *icipe*, 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 achievements of the RSIF program for the period running from **1 July– 31 December 2021**. A summary is included below:

- a) The virtual RSIF conference was held from 15-17 November 2021 under the theme “African-led science, technology and innovation for contributing to the Sustainable Development Goals (SDGs) and stimulating global development”. With over 900 participants, sessions focused on Covid in Africa and the role of science, technology and innovation; Building research capacities; and Science Funding in Africa.
- b) Selection of four additional African Host Universities (AHUs) to offer PhD programs in the PASET priority thematic areas was concluded by EB approval on 15 Aug 2021. The PASET RSIF Partnership agreements with the newly selected AHUs are being finalized and the universities are expected to receive students by end of February 2022.
- c) PhD Scholars in Cohorts 1, 2 & 3 have progressed in their PhD studies despite the Covid-19 challenges. Total number of students awarded is 184 from over 20 African countries, with funding from eight contributing African countries. Of these, 71 (39%) are women. Due to departures for various reasons, there are currently 173 RSIF PhD students across the three cohorts at various stages of doctoral training. Most departed in the early periods of their scholarship and will be replaced with other students in Cohort 4. To date a total of 64 high quality peer reviewed papers have been published by students.
- d) The Cohort 4 call for RSIF PhD Scholarships was published on 16 August 2021 with deadline for submission on 7 October 2021. A total of 1,948 (361 Female and 1,587 Male) applications were received. Awarding of Cohort 4 scholarships is expected to be concluded in February 2022.
- e) The RSIF mentorship platform design is almost complete. Microsoft teams has been selected to provide a space and community for both formal and informal mentoring. The platform will enhance and contribute to the sharing of information by members, provide both emotional and professional support as well as the provision of expert feedback and guidance. The system is expected to go live in February 2022.
- f) During the reporting period, the 14 active RSIF projects awarded in the first round continued to progress well despite initial delays. Under the Innovation grants Type 1 (Institutional Innovation Capacity Building Program Grant) focus is on establishing innovation enabling environments and strengthening commercializing. Completed activities included development of draft policies on innovation and intellectual property management and strengthening university technology transfer offices; and stakeholder mapping of key industry players. Technical assistance was provided to support grantees in their implementation. On 27 October 2021, the PASET EB approved the award of an additional 10 research grants from the second call for proposals. These new set of RSIF projects are expected to initiate implementation in the first quarter of 2022.
- g) The first Call for proposals for award of grants through the government of Mozambique contribution to the RSIF windows 2&3 was published on 13 September, 2021 with deadline for submission on 15 November, 2021. A total of 21 applications were received from Mozambique, thirteen (13) Research Awards, three (3) ICBP Grants and five (5) Cooperability grants. The RCU will finalize the contracting process in the quarter ending March 2022.
- h) The 1st Call for Proposal for award of 12 grants under *the Accelerating Inclusive Green Growth through*

Agri-based Digital Innovation in West Africa (AGriDi) project was published with deadline date for submission of proposals for June 30, 2021. The Grants Independent Technical Committee (GITC) reviewed and selected 12 proposals to be awarded. A meeting of project leaders for the AGriDi projects will take place in February 2022.

- i) RSIF has recruited a professional marketing firm to support RSIF communications. The firm started its work in December 2021.

Key challenges during the period

1. As a result of the World Bank Mid-term review and project restructuring, a no-cost extension was approved for the RSIF Project from June 2024 to December 2025. RSIF awaits decision from the WB on additional financing. In the meanwhile, RSIF budget is stretched with limited scope to take on board new, not previously programmed activities.
2. A number of cohort 1 students have been slightly delayed due to the covid challenges that led to laboratories and other research facilities being unusable during the pandemic. This has meant that some additional costs for, especially stipends beyond the planned 24 months will have to be allocated.
3. Most proposals to the Window 2 & 3 (Research and innovation grants) deemed in-eligible were either incomplete applications or were not from eligible applicants in line with the Call objectives. The RCU will provide additional capacity building support to the teams to respond to these issues. This will also respond to the need the lower than anticipated number of proposals submitted to the Call especially for the innovation grants and to some thematic areas specifically the energy and minerals, mining and materials engineering. A special call will be prepared and shared and relevant capacity building activities implemented in support.

Summary of Request to the EB in this report

(1.1) RSIF Resource Mobilization and Permanent Fund design

The EB is requested to:

- Note the appreciation and positive feedback on EB active contribution and participation that contributed to a successful virtual RSIF pre-conference from 15-17 November, 2021. Lessons will feed into upcoming events and joint outreach to potential funders towards growing the general fund and operationalizing the permanent fund.

(1.4 & 2.2) Implementation status of Research Grants (Window 2, Type 1) and Selection of Cohort 3 PhD Scholars

The EB is requested to:

- Note the progress in implementation of the Research and Innovation grants, particularly progress made by research and innovation grantees in the implementation of their projects.
- Invite the EB to attend presentations by selected projects teams on their progress and impact on Day one of the World Bank Implementation Support Mission to *icipe*.

(3.1) RSIF communications

The EB is requested to:

- Review the draft logo and tagline suggested by PMS for RSIF and provide inputs.

(3.3) Monitoring, evaluation and other cross cutting issues

The EB is requested to:

- Note that the current contributions from governments will not be affected by the discussion around charging of administrative fees, and to facilitate the agreement between *icipe* and PASET be finalised.
- Note the improvement in satisfaction by RSIF students to the support provided by the RSIF RCU.

1.0 Introduction

The Regional Scholarship and Innovation Fund (RSIF), the flagship program of the Partnership for skills in Applied Sciences, Engineering and Technology (PASET), was established by African governments 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 up to **31 December 2021**. The report is arranged along RSIF program component areas: viz, Component 1: *Capacity Development for the Operation of the Scholarship, Research, and Innovation Fund*; and Component 2: *PhD Scholarships, research grants and innovation grants*.

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 Fund. Key activities undertaken during the period are highlighted below.

1.1.1 Resource mobilization

To engage with new partners and share lessons from RSIF implementation, *icipe* organised the RSIF virtual Conference from 15-17 November 2021 under the theme “African-led science, technology and innovation for contributing to the Sustainable Development Goals (SDGs) and stimulating global development”. A total of 988 participants attended the Conference. The conference discussed various topical issues including Covid-19 in Africa and how to build scientific capacity to respond to future pandemics; Building research capacities in Africa through the use of sandwich models, and benefitting from symmetrical north south partnerships, and funding for building science capacity in Africa. The Conference program, speaker profiles and video recordings may be accessed [here](#). The Conference provided an opportunity to follow up with resource mobilisation efforts for RSIF through:

- Ministers from five countries (Côte d’Ivoire, Korea, Mozambique, Kenya and Rwanda) attended the conference and spoke on the expected role that RSIF should play in building capacity at the national level. They highlighted future expectations of the Fund and their potential future contributions.
- Prof. Fulufhelo Nelwamondo, CEO of South Africa’s National Research Foundation (NRF) delivered a keynote on Science Funding in Africa - role of RSIF for SDGs and Africa’s development at the RSIF pre-conference, see recording [here](#). RSIF RCU will follow up with Prof. Nulwamendo on partnerships with RSIF. As a follow up, the RSIF Manager also provided key note to NRF-Science Granting Councils Initiative (SGCI) meeting on 18 November, 2021 for heads of 18 science granting councils.
- Through the RSIF pre-conference, several promising contacts for RSIF resource mobilization were made and related consultations held with senior experts from foundations, experts in governance, impact investments and professionals associated with African companies and philanthropy sectors.

icipe has further engaged with the MasterCard Foundation to seek for greater partnership with RSIF. The Foundation was invited to participate in the PASET-RSIF Conference where Prof. Philip Cotton, Director Human Development, Mastercard Foundation was a panelist. Further, a meeting was arranged and held (30-November 2021) with Prof. Cotton on possibilities for Mastercard Foundation’s collaboration with RSIF. The meeting was positive and follow up will be pursued. The meeting was

attended by the EB Chair, Prof. Aminata Sall Diallo; Mr. Mike Hughes, EB member for Rwanda; Dr. Segenet Kelemu, Director General and CEO, *icipe*, and RCU representatives.

Other key resource mobilisation activities undertaken during the reporting period were:

- 1) Meetings held in Nairobi with OCP Africa on possible collaboration on RSIF.
- 2) Preparations for follow-up discussions planned with Gates Foundation at *icipe* scheduled for January 2022.
- 3) French Embassy visit to *icipe* and follow up meetings in October 2021. France has since committed to fund the sandwich programme of two PhD students in France in this fiscal year and 8 each year in following years. Discussions are also underway with several French IPIs (Université Côte d' Azur and IRD) to support engagements with the Agence Française de Développement (AFD) .
- 4) Nigeria: Contracting modalities in progress following further discussions held in December 2021.
- 5) Mozambique: First tranche of USD 1.6m has now been received. The RSIF-RCU participated in the MozSkills implementation support mission virtually on 1 December 2021. Review and selection of first round of MozSkills awardees is ongoing.
- 6) 2nd tranches of funding were received from Ghana and Burkina Faso. Senegal and Benin funds receipts were delayed while finalising legal opinions.
- 7) Meetings were held with Tanzania to connect with new Minister on their interest to join RSIF. Follow-up with Malawi is also underway.
- 8) RSIF had an exhibition booth at the Uganda national day celebrations held in Nairobi in October 2021. The RSIF RCU met with leader of the Parliamentary Committee on Education and other government officials during the exhibition event.
- 9) Erasmus+ Capacity Building in Higher Education 2022 calls for proposals were released late November 2021 with African Higher Education Institutions eligible for funding in consortium with European universities. *icipe* organized an RSIF info webinar on this funding opportunity on 8 December 2021 to highlight the proposal requirements and request for expressions of interest among RSIF AHUs. Committed teams in RSIF AHUs are to undertake an intensive grant writing training workshop in early 2022 (covid-19 context permitting).
- 10) The RCU drafted a concept note for the proposed PASET donor roundtable to be held in Senegal in November 2022.

The current status of funding to RSIF is presented in Table 1.

1.1.2 Design of the RSIF Permanent Fund

As part of the science funding in Africa session in the virtual RSIF pre-conference on 17 November 2021, a panel discussion on establishing the endowment fund was held (video recording [here](#)). The panel discussed ways for the partnership to raise long-term investments in Africa's science capacities in the post-Covid era – and considered possible modalities for establishing the RSIF permanent fund. The panel was comprised of senior experts drawn from global and African foundations, experts in governance, impact investments and professionals associated with African companies and philanthropy sectors as detailed in Table 2. *icipe* is following up with the Panel to constitute a committee to support framing the discussions around the establishment of the Fund. Recommendations were received on the endowment fund's vision and focus; structure and governance strategies; involvement of stakeholders; and resource mobilization. (See *annex 1 for details*).

Table 1: Committed and Received Funding to the RSIF Program as of 31 December 2021

No	Donor	Committed Funding	Funds Received	Contract End Date	Type
1	Benin	2.0	0.3	30-Jun-24	WB project
2	Burkina Faso	2.0	0.8	31-Dec-23	WB project
3	Côte d'Ivoire	2.0	1.0	n/a	Direct
4	European Union	4.7	1.9	31-Jan-25	Direct
5	Ghana	2.0	0.8	31-Dec-23	WB project
6	Kenya	2.0	2.0	n/a	Direct
7	Mozambique	6.0	1.6	31-Dec-25	WB project
8	Nigeria	4.0	-	30-Jun-24	WB project
9	Rwanda	2.0	2.0	n/a	Direct
10	Senegal	2.0	0.3	31-Dec-23	WB project
11	South Korea	9.0	2.2	30-Jun-24	WB Trust Fund
12	World Bank	15.0	7.8	30-Jun-24	World Bank IDA Grant
	Total	52.7	20.7	-	-

Draft list of philanthropists have been prepared and letters are under preparation to be sent through the PASET GC chair. Contact was also established with board member of Africa Philanthropy Forum (Mrs. Ndidi Okonkwo Nwuneli).

Table 2 . Panel of experts – Establishing an endowment fund

Name	Occupation
1) Prof. Wole Winston Soboyejo (Chair)	Provost, Senior Vice President, Worcester Polytechnic Institute, Boston and PASET CAG member
2) Dr. Mercy Karanja	Senior Program Officer, Bill and Melinda Gates Foundation
3) Mrs. Ndidi Okonkwo Nwuneli (MFR)	Co-founder/Managing Partner, Sahel Consulting
4) Prof. Philip Cotton	Director, Human Capital Development, Mastercard Foundation
5) Mrs. Dora Waruiru	Head of Foundation, Cooperative Bank
6) Mr. Joel Kibet Molel	Principal Resource Mobilization and Partnerships Officer, African Development Bank
7) Mr. Marcel Mballa-Ekobena	Sloan Fellow, London Business School, Investments, Markets and ESG Executive
8) Dr. Dorothy Nyambi	President and CEO - Mennonite Economic Development Associates (MEDA)

Request to EB:

- Note with appreciation EB members' active contribution and participation in the virtual RSIF pre-conference from 15-17 November 2021.

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)

Selection of four additional African Host Universities (AHUs) to offer PhD programs in the PASET priority thematic areas was concluded with EB approval on 15 August 2021. This brings the total number of RSIF AHUs to 15, with three AHUs per PASET thematic area. Of the 15 AHUs, 11 are currently hosting RSIF scholars while the four newly added AHUs will begin hosting scholars from February 2022 on conclusion of selection for Cohort 4. Partnership agreements with two of the newly selected AHUs – International Institute for Water and Environmental Engineering (2iE) and University of Abomey-Calavi (UAC) were fully signed by end of December 2021. The other 2 (Haramaya University and Makerere University) are still under review at the AHUs and it is anticipated that signing of agreements between the AHUs and *icipe* will be complete by end of February 2022.

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

The RCU continues to support the strengthening of capacity of RSIF AHUs to enhance the quality of their training. The program also delivers training courses to RSIF Scholars to ensure that they are able to complete their PhD's successfully and also to transition to research careers on the continent. Guided by the RSIF Capacity Building Strategy, guest webinars, student webinars and cross-cutting courses and mentorship platform development were undertaken during the period as follows:

1.3.1 RSIF Guest Webinar Series

Monthly guest webinars were delivered, including the three below for the October to December period:

- (1) Prof Jacko Olivier, Professor in Multimodal Learning Faculty of Education North-West University, South Africa; "Radical Solutions for Education in Africa," 27 October, 2021.
- (2) Dr Holger Kirscht, Social Scientist and Gender Expert at *icipe*; "Skills for applying a gender lens in research for development." 24 November 2021.
- (3) Dr Jean Hakizimana, RSIF's 1st PhD graduate, and his Supervisor Prof Gerald Misinzo at the Sokoine University of Agriculture (SUA) "What it takes to complete a PhD in time," 15 December 2021.

1.3.2 RSIF PhD Student Webinars and delivery of cross cutting courses.

Scientific presentations by eight RSIF PhD students were given at three student seminar events, held monthly from October - December 2021 (previous three months reported in the last report). The following cross-cutting courses were delivered for RSIF PhD students:

1. 15 November 2021: A course on communication and social media was delivered by Ms Maureen Agena (*icipe*) and Ms Sakina Mapenzi (*icipe*)
2. 23-24 September 2021: Monitoring and Evaluation (M&E) virtual training given by Dr Michael Kiddoido (*icipe*), Mr Taye Bedaso (*icipe*), Dr Mustapha M. Bello (Bayero University) Dr. Devotha Nyambo (NM-AIST), Dr. Yaw Osei- Asare (University of Ghana).

1.3.3 Mentorship platform

In the RSIF context, achieving quality mentorship in situations that do not have the opportunity for face to face interactions, easy connectivity and necessary resources has been a challenge. Thus, the mentorship platform has been designed to address this through the use of an interactive online tool, Microsoft teams, with the aim of providing a space and community for both formal and informal mentoring. Towards this end, the mentoring platform has managed to obtain licensing from Microsoft that will allow its operation as an educational entity. Further, the creation of an online literature repository to be used as a guide book and reference point by mentors/researchers/supervisors is under development. The platform will enhance and contribute to the sharing of information by members, provide both emotional and professional support as well as the provision of expert feedback and guidance. With respect to the informal mentorship, the Yammer app (on MS Teams) has been identified as the appropriate avenue for this where members can connect and build communities, and support each other to reach their goals in transformative and growth oriented ways. Initial units of the platform comprising of collaborative experiential learning have been curated. The platform has been designed to promote and accommodate contributions and interactions with industry and external players for purposes of networking and showcasing the RSIF program, through the creation of working groups. The system is expected to go live in February 2022.

1.3.4 Increased access to subscribed e-resources for AHU Libraries

Enhancing e-resources for universities and RSIF Students: AHU libraries continue to access subscription e-resources (e-book and e-journal collections) subscribed through RSIF. In total, the AHUs have subscription access to 45,136 e-resources (41,926 e-books and 3,210 e-journals). Of the 45,136

e-resources, 4,474 e-books and 452 e-journals have perpetual access. Usage of the e-resources is at over 374,000 hits.

Strengthening skills for accessing e-resources: To enhance access to e-resources, RSIF is facilitating Science Direct (Elsevier) publisher training on 16 December 2021 for University of Ghana, University of Nairobi, The Nelson Mandela African Institution of Science and Technology, University of Rwanda, and Sokoine University of Agriculture. Other publisher trainings are scheduled for 1st quarter of 2022.

1.4 Capacity development for the operation and management of innovation grants

1.4.1 Implementation Status of RSIF Innovation Grants

During the reporting period, the six (6) active projects awarded under Innovation grants Type 1 (Institutional Innovation Capacity Building Program Grant) continued to implement activities towards establishing innovation enabling environments and strengthening commercializing. During the period, project teams advanced in the development of draft policies on innovation and intellectual Property management and strengthening their technology transfer offices. University of Ghana, AUST, Bayero University and Sokoine University are among the universities which have developed various policies and guidelines related to innovation and IP management. Training workshops and guest lectures were conducted to faculty and students on various topic such as “research commercialization, IP protection and technology transfer” among others. For example, the University of Ghana has developed an online course with two modules on agri-Innovation development and commercialization of research which has been presented to graduate students and faculty. The project is currently developing a course on innovation and entrepreneurship targeting graduate students which will be accredited by the university.

Stakeholder mapping of key industry players for partnerships has also been done. Bayero University has established a database of key actors in food and agriculture innovation ecosystem. The project has also mapped key innovation hubs in Nigeria for possible collaboration. Various projects are also following on with their administrative units on the signing of MoU with their private sector partners to support activity implementation beyond the project life.

Similarly, the two (2) innovation projects funded under Cooperability Grants have progressed in processes for laboratory and field work to improve their prototypes and produce minimum viable products. The University of Rwanda’s Smart Bee Hiving Technology has completed design of the IoT device and is currently procuring material for the development. Annex 2 contains a detailed status of each grant project.

1.4.2 Mozambique contribution to RSIF for award of research and innovation grants

The first Call for proposals for award of grants through the government of Mozambique contribution to the RSIF windows 2&3 through the World Bank funded project on “Improvement of Skills Development in Mozambique (MozSKills)” was published on 13 September, 2021 with deadline for submission on 15 November, 2021. A total of 21 applications were received from Mozambique, thirteen (13) for the Research Award, three (3) to the ICBP Grants and five (5) to the Cooperability grants (Table 3).

The RCU has completed eligibility screening of the proposals, independent expert review is ongoing, and financial and administration assessment of eligible organizations is ongoing. Most proposals deemed in-eligible were either incomplete applications or were not from eligible applicants in line with the Call objectives. The RCU also noted the lower than anticipated number of proposals submitted to the Call especially for the innovation grants and to some thematic areas specifically the energy and minerals, mining and materials engineering. A special call will be prepared and shared. The RCU will prioritize targeted dissemination to specific institutions and relevant departments to create more

awareness on the Call for Proposals as well as hold more information webinar sessions to provide clarifications on how to prepare winning proposals in line with the Call objectives. The RCU will finalize the contracting process in the quarter ending March 2022 (see Table 4 for proposed timelines).

Table 3: Summary Statistics RSIF/MozSkills Research and Innovation Grants Call for Proposals.

Grant Window	Grant Type	No. of grants available for award	No. of Proposals received	No. of Eligible Proposals	Max. Grant Amount (USD)	Max. Duration (months)
Research Grants	Research Award	7	13	10	90,000	24
Innovation Grants	Institutional Capacity Building Program Grants (ICBP)	5	3	2	70,000	24
	Cooperability Grants	3	5	3	70,000	24
Totals		13	21	15		

Table 4: Proposed timelines for award of RSIF/MOZskills Research and Innovation Grants

Activity	Timeline	Status
Call for Applications opens	Sept 10, 2021	Complete
Webinar sessions	October 21, 2021	Complete
Deadline for application	Nov 18, 2021	Complete
Eligibility screening and check by the RCU	Dec 6, 2021	Complete
Independent expert review	Feb 19, 2022	On-going
Evaluation by the GITC	Feb 27, 2022	
GITC Report for approval	Jan 31, 2022	
Formal contracting	March 31, 2022	

1.4.3 Accelerating inclusive green growth through agri-based digital innovation in West Africa (AGriDI Project)

The 1st Call for Proposal for award of 12 grants under the AGriDI project was published with deadline date for submission of proposals for June 30, 2021. The sub-grant amounts are between EUR 150,000 and EUR 300,000 per project with funding from the European Union, ACP Innovation Fund. During the reporting period, *icipe* concluded the eligibility checks and with support from its consortium partner (Agropolis Foundation) coordinated the external review of the 50 applications that passed the eligibility screening checks. The results from the independent review process were shared with the RSIF Grants Independent Technical Committee (GITC) for review and selection of proposals for award. A meeting of the GITC to evaluate and select proposals was held on 28 September 2021 and 12 proposals were awarded.

All potential grantees were subjected to a due diligence check between October to December 2021, which assessed six (6) key criteria, namely: i) Partner legal status and financial management structure; ii) policies and procedures of the organizations; iii) accounting; iv) assurance; v) internal controls and managerial controls; and vi) reporting and monitoring. Nine (9) out of twelve (12) potential grantees passed the due diligence checks. By the end of this reporting period, discussions have been ongoing with the other three to facilitate their compliance with the qualification criteria. For the applications that had no issues arising from the due diligence checks, it is expected that the formal contracting and signature process will be completed by end of February 2022. The outcome of the AGriDI evaluation process and the listing of the grantees is attached as Annex 3 to this report.

1.4.4 Grantees Technical Assistance Implementation Plan

The RCU facilitated a business incubation workshop for the Innovation Cooperability Grants projects from 25-28 October 2021. Project team members from the university and industry representatives of the two active innovation projects from Rwanda and Côte d'Ivoire participated in the workshop, which was facilitated by an innovation and entrepreneurship expert, Dr. Jesper Vasell. The objective of the workshop was to guide project teams on various concepts in business development to enable them develop route to market business plans, this support is provided as part of enhancing business modelling for the projects.

Additionally, in collaboration with UM6P Venture Capital Firm, RSIF delivered a webinar on 3 December 2021, on venture capital funding opportunities for sci-tech startups in Africa. The venture capital firm is also currently providing business mentorship support to six (6) competitively selected innovative start up projects by RSIF PhD scholars under their "Explorer Mentorship Program". The RCU continues to support the grantees establish strategic partnerships with industry and academic partners to collaborate in the implementation of project activities. A technical and policy learning workshop will be organized in May 2022 to enable university teams share lessons and best practices to strengthening their university innovation ecosystems and innovation policy frameworks.

Component 2: PhD Scholarships and Research Grants

2.1 Training of Doctoral Students in ASET fields

2.1.1 Progress in the management of doctoral students

PhD Scholars in Cohorts 1, 2 & 3 have progressed in their PhD studies despite the Covid-19 challenges. The total number of students awarded are 184 from over 20 African countries, with funding from eight contributing African countries. Of these, 71 (39%) are women. Since award by the EB, eleven of the students have resigned for various reasons (see table 5 below). Due to resignations, there are currently 173 RSIF PhD students across the three cohorts at various stages of doctoral training. Most departed in the early periods of their scholarship and will be replaced with other students in Cohort 4.

Table 5: Scholar resignations

	Name	Cohort	Gender	Nationality	Reason for resignation
1.	Lilian Mulewa	1	F	Kenyan	Other opportunity
2.	Yacouba Ouedraogo	2	M	Burkina Faso	Sickness of spouse
3.	Zvirevo Chisadza	2	M	Zimbabwe	Other opportunity
4.	Erasmus Muh	2	M	Cameroon	Claimed lack of supervisory support from AHU
5.	Sakiratou Karimou M	3	F	Benin	Family issues
6.	Lilian Motaroki	3	F	Kenya	Other opportunity
7.	Sarah Anyango Odera	3	F	Kenya	Other opportunity
8.	Oré Ndiaye Diédhiou	3	F	Senegal	Technical issues with registration at AHU
9.	Tesfau Bekele Adhena	3	M	Ethiopia	Stuck in war zone
10.	Magreth Macha	3	F	Tanzania	Other opportunity
11.	Sheriff Saka	3	M	Nigeria	Other opportunity

To date a total of 64 high quality peer reviewed papers have been published by students (Table 6). Cohort 1 have published 41 peer-reviewed and conference papers, while Cohort 2 have published 23 papers. Of these, 16 papers were authored by females and 48 by males. See Annex 4 for full details on publications by RSIF scholars.

Table 6: RSIF Scholars (Cohort 1-4) publications (2018 – December 2021)*

Thematic area		Gender	2018	2019	2020	2021*	Total	Thematic total
1.	Climate change	Female	-	-	2	1	3	11
		Male	-	2	-	6	8	
2.	Energy including Renewables	Female	-	-	-	1	1	4
		Male	-	-	1	2	3	
3.	Food security and Agribusiness	Female	-	-	1	2	3	20
		Male	-	1	9	7	17	
4.	Minerals, Mining and Materials Engineering	Female	-	-	-	4	4	18
		Male	-	1	5	8	14	
5.	ICTs including Big Data and Artificial Intelligence	Female	-	4	-	1	5	11
		Male	-	1	2	3	6	
Total			0	9	20	35		64

*All works are uploaded on RSIF Repository: <https://repository.rsif-paset.org>

2.1.2 Status of Cohort 1 RSIF PhD Scholars

Two (2) Cohort 1 scholars graduated in November 2021 at Sokoine University of Agriculture (SUA) in Tanzania. Another three (3) have successfully defended their thesis and are set to graduate soon. One additional scholar is ready to defend her thesis in February 2022. Majority of the remaining cohort 1 scholars are preparing to defend their thesis in the first part of 2022.

2.1.3 Current Status of the Cohort 2 RSIF PhD Scholars

Cohort 2 scholars are currently in their AHUs completing their proposal writing and conducting their research. One scholar who had deferred their studies will be reporting to their AHU in January 2022. 44 scholars have defended their proposals while 24 who are required to undertake mandatory coursework have successfully completed the courses. Scholars that have defended their proposals have embarked on data collection activities as they await to be matched to suitable International Partner Institutions (IPIs). The scholars have attended an average of six (6) training courses and nine (9) guest webinars. As at 31 December 2021, 40 Cohort 2 scholars had been matched. Delays have been faced with finalising the institutional level tri-partite agreements as the partners have to subject these to reviews by their respective legal teams. Scholars are now expected to begin moving to the sandwich programmes in the first and second quarters of 2022. See Table 7 & 8 for scholar matching status.

Table 7: Progress of Cohort 2 scholar placement in sandwich programmes

No. of students	Status
40	Matched
16	In progress
8	Not started
3	Resigned
67	TOTAL

Table 8: Cohort 2 Scholar sandwich placement by gender and institution

IPI	No. of Cohort 2 Students Matched	Female	Male
GBST-SNU	11	4	8
GRC-SNU	2	0	1
KIER	2	1	1
KIT	3	1	2
KRICT	2	1	1
NESTLE	1	0	1
NRI	6	6	0
U-Gent	2	1	1
UM6P	5	3	2
UP	2	0	2
VT	4	2	2
TOTAL	40	19	21

2.1.4 Current status of Cohort-3 RSIF PhD Scholars

Cohort 3 scholars began their studies from mid-June 2021. To date, 73 scholars have reported to their AHUs as per the Table below. Scholars admitted to Universite Felix Houphouet-Boigny were expected to report to the AHU in January 2022. 19 of the scholars funded by the **Nigerian** government still await to be awarded scholarships since the Subsidiary Agreement between the Nigerian Government and *icipe* is yet to be signed by Nigeria. Discussions are underway between the National Universities Commission, on behalf of the Government of Nigeria and *icipe*.

Table 9: Cohort 3 scholars at AHUs

	African Host University (AHU)	No. of scholars that have reported
1.	AUST	5
2.	NM-AIST	6
3.	SUA	13
4.	UGB	1
5.	UR	6
6.	UniPort	1
7.	Bayero University	5
8.	KU	7
9.	UG	10
10.	UFHB	10
11.	UON	9
	Total	73

2.1.5 Cohort 4 Call for Applications

The Cohort 4 call for RSIF PhD Scholarships was published on 16 August 2021 with deadline for submission on 7 October 2021. A total of 1,948 (361 Female and 1,587 Male) applications were received in response to the call and eligibility screening by RCU completed on 5 November 2021. Review and shortlisting of applications by AHUs and one-way interviews for shortlisted applicants was completed 31 December 2021. Desk review of 331 applications by the Independent Review Committee (IRC) was completed on 21 January 2022. The Independent Review Committee Evaluation held a virtual meeting on 25 January 2022 to review and select scholars for award of scholarship. Awarding of Cohort 4 scholarships is expected to be concluded in February 2022 (See Table 10).

Table 10: Timelines for the recruitment of cohort 4 RSIF PhD Scholars

No.	Activity	Timeline
1	Call for Applications open	15 August 2021
2	Deadline for application submission	7 October 2021
3	Screening/completeness check by RCU	5 November 2021
4	AHU shortlisting	15 December 2021
5	Shortlisted candidates' one-way interview	31 December 2021
6	Desk review and evaluation of applications by IRC	21 January 2022
7	Evaluation by the Independent Evaluation Committee	25 January 2022
8	Submission to EB for Award	25 February 2022

2.2 Research Grants

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

Despite the challenges of lengthy and delayed procurement process and the delays occasioned by COVID 19, research grants (Window 2) project teams have advanced in their research works. Project teams have also advanced in their field work data collection and developed prototypes of their research products, e.g the University of Rwanda's project on indoor air pollution has finished developing the first three (3) of the 60 IoT devices to be used of indoor air pollution monitoring. RSIF and other PhD students have also been trained on how to develop such prototype tools to facilitate their research. The lack of suppliers for appropriate IoT tools has affected the pace of implementation of the two IoT projects., The RCU is supporting the grant teams to disseminate the request for quotation widely to its supplier database. Annex 2 provides more details and status of each grant project.

Project teams have also participated in various conferences and made presentations relevant to their work. RSIF students engaged in project research have published in high impact peer reviewed journals. So far two scholars and one faculty member have published two papers based on project related research. The Links to the publications are listed below:

1. University of Rwanda: Smart Bee Hiving Technology; <https://www.mdpi.com/1424-8220/21/10/3522>
2. UFHB: Yams Project- <https://doi.org/10.1109/GHTC53159.2021.9612449>
3. University of Nairobi, Solar Cells Project- <https://doi.org/10.1016/j.matlet.2021.130099>

2.2.2 Second Cohort of Research and Innovation Grants

On 27 October 2021, the PASET EB approved the award of 10 Research Award grants and three (3) Cooperability Innovation grants to faculty and researchers of RSIF African Host Universities (Table 11). A feedback session for winning applicants was held on 6 November 2021, to provide guidance to project teams on revising their proposals, budgets and Monitoring and Evaluation frameworks to meet the requirements of the program and address comments from the independent experts. The RCU has supported project teams to prepare their proposal documents for contracting. The process is currently at advanced stages to be finalized by in the next quarter. A grants management training will be conducted, to provide compliance and technical implementation support (See Annex 5 - List of approved projects).

Table 11. Summary Statistics for the 2nd Call for Proposals (Research Award and Cooperability Grants

Grant Type	No. of Applications Received	No. of Grants available for award	No. of Grants approved by PASET EB	Max Grant Amount	Max. Duration
Research Award (Research Grants, Type 1)	36	10	10	90,000	2 years
Cooperability Grants (Innovation Grants, Type 2)	7	3	3	50,000	2 years
Total	43	13	13		

Request to EB:

- Note the progress in implementation of the Research and Innovation grants, particularly progress made by research and innovation grantees in the implementation of their projects.
- Invite the EB to attend presentations by selected projects teams on their progress and impact on Day one of the World Bank Implementation Support Mission to *icipe*.

C. Cross-cutting activities

3.1 RSIF communications

RSIF communications during the period grew further. RSIF’s communication strategy relies on its website to consolidate the activities and news, linked to its vibrant social media activities. A total of 18 blog posts about the various RSIF activities were prepared and shared on the website. Also, six short video documentaries were developed about the various student projects, ten short video documentaries on the student projects in The Nelson Mandela African Institution of Science and Technology (one of the African Host Universities in Tanzania) and nine videos on the annual pre-virtual conference held in November 2021 were recoded and uploaded on [YouTube](#).

Between October and December 2021, 12 issues of the RSIF weekly newsletter were produced bringing the total to 36 weekly issues (4 each month and 2 in the month of December) since January 2021. The total number of subscriptions to the newsletter grew by over 2000 from 8,908 to 11,649. Following consistent posting linked to strategic campaigns and events, RSIF’s statistics on social media platforms such as Twitter, Facebook, LinkedIn, Instagram, and YouTube are growing steadily (with 1991, 2400, 739, 191 and 241 followers respectively). Engagement is up significantly and continues to grow. The announcement for Cohort 4 PhD call for scholarships was widely disseminated by various news channels including publication in at least two newspapers in each PASET participating country. Students’ projects and success stories continue to be documented.

RSIF has now fully onboarded the marketing firm Professional Marketing Services (PMS), to help contribute to the successful implementation of the RSIF Communications Strategy and achievement of its goals and objectives. The firm will contribute to increasing the visibility of RSIF and effective sustainable resource mobilization for RSIF and achievement of its desired impact on Africa’s socio-economic transformation. To enhance RSIF’s brand awareness and visibility, the firm has developed distinctive branding, in form of proposed logos and taglines, for RSIF to ensure consistency in messaging, visual identity and representation in all communication material and platforms. After deliberation from the team, the most firm has suggested further development of the log and tagline in Figure 1.

Under the leadership of RCU, the services to be provided by the Consultancy firm will include:

- Finalise a distinctive branding for RSIF (narrative, tagline, images e.g., logo) and brand manual to ensure consistency in messaging, visual identity, and representation in all communications materials and platforms.

- Develop a package of standard materials including brochures, and templates (presentations, posters, banners etc) using the distinctive branding for all communication purposes, to be used by all the partners in the PASET-RSIF network for wider impact.
- Identify evergreen and immediate campaign opportunities and create effective messages that highlight RSIF achievements and products (layout and communication channels).
- Implement global, continental, and national RSIF visibility campaigns and enhance geographical reach of RSIF's communication activities in support of achievement of the strategic goals.
- Support RSIF related convenings (Press briefings, media advisories, talk shows, Webinars etc), and other events (for example, relevant global observance days) to ensure visibility and to meet resource mobilization targets.
- Develop a robust crisis communication plan and implement it.

Figure 1: Suggested logo and tagline for further development.



(Portrait logo version)



(Landscape logo version)

Request to the EB:

- Review the draft logo and tagline suggested by PMS for RSIF and provide inputs.

3.2 PASET agreement with icipe

RSIF currently has funding from nine African countries and the Government of Korea, the ACP Innovation Fund of the European Union and the World Bank. This funding is financing RSIF PhD Cohorts 1 - 4 up to December 2025, while the World Bank grant is funding the administration costs for the programme level activities at *icipe* up to December 2025. In this regard, for any RSIF scholars beyond Cohort 4, it will be necessary for *icipe* to charge an administration cost because the World Bank grant will be exhausted. *icipe* will in the next period prepare the related administrative costs for this purpose.

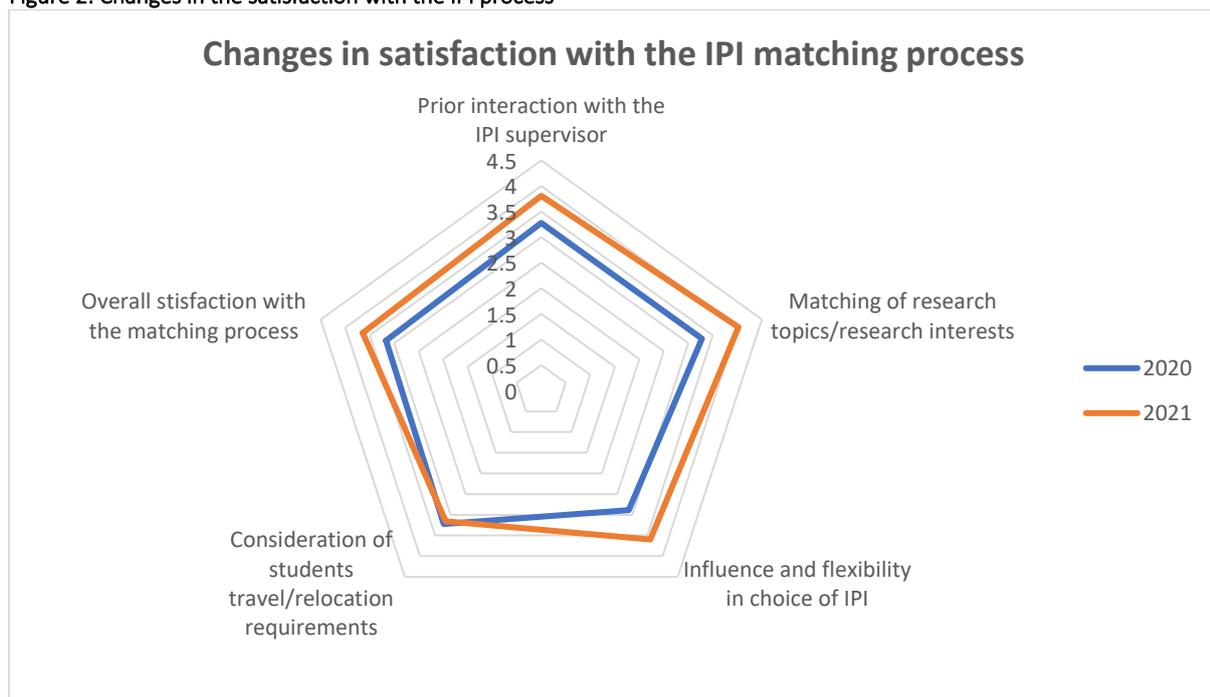
- Noting that the current contributions from governments will not be affected by the discussion around charging of administrative fees, we request that agreement between *icipe* and PASET be finalised.

3.3 Monitoring and Evaluation

Project monitoring and evaluation function during this reporting period focused on reviewing the survey tools and implementing the second PhD students' satisfaction survey, participating in preparatory meetings for the first RSIF annual conference, reviewing the AGRiDI grants results framework, completing the AGRiDI project monitoring and evaluation framework, and developing the RSIF research and innovations grants monitoring and evaluation framework/system. The second project stakeholder satisfaction survey targeted the 126 RSIF students who had reported to their respective AHUs at the time of the launch of the survey. These included 15 from the first cohort, 61 from the second cohort, and 35 of the third cohort group. The survey was released on the 26 October

and closed on the 26 November 2021. At the close of the survey, a total of 105 students (14 from cohort 1, 59 from cohort 2, and 32 from cohort 3) had completed and submitted the questionnaire. Data analysis was completed, a draft report has been produced and ready for sharing with a wider audience. Figure 3 is a pictorial summary of the changes in students' satisfaction with IPI matching process between 2020 and 2021. The survey revealed an overall improvement in satisfaction with the IPI matching process. The greatest improvements in satisfaction were in respect to their influence in the choice of IPI and the matching of research interests between the IPI supervisors and the students. On the other hand, they expressed lowest satisfaction with the programme's level of consideration of students' travel/relocation requirements.

Figure 2: Changes in the satisfaction with the IPI process



M & E support has been provided to the AGRiDI project too, whereby all grantees were required to submit revised logical frameworks that were consistent with the overall AGRiDI logical framework. The M&E specialist has engaged each grantee in one-on-one meetings to ensure that the individual grants results frameworks were logical, aligned with the overall AGRiDI logical framework, and ready for final approval by management. The review of grants' results framework further resulted in the development of a draft AGRiDI monitoring and evaluation framework. Similarly, the monitoring and evaluation specialist, during this reporting period, engaged all second call research and innovations grantees in reviewing and improving their draft monitoring and evaluation systems. All proposals were reviewed; one-on-one technical support meetings arranged for those grantees who required substantial review and support. An RSIF research and innovations grants' monitoring and evaluation framework has been initiated and will be in its final stages during the next reporting period. Project monitoring and evaluation function continued to collect and collate project outputs and activities information regarding the project periodic workplan.

3.4 Safeguards and RSIF Grievance Redress Mechanism (GRM)

There are general remaining grievances from the 19 Cohort 3 awarded scholars that are funded by the Nigerian Government contribution since they are yet to receive their scholarship contracts. These scholarship contracts are yet to be issued since the Subsidiary Agreement between the Nigerian

Government and *icipe* has not yet been signed by Nigeria. Discussions are on-going with the Government of Nigeria.

Cohort 3 scholars from the Université Félix Houphouët-Boigny (UFHB) raised grievances regarding the delayed reporting date. This was discussed and resolved. The scholars will report in January 2022.

A scholar from SUA raised a matter in regard to delayed receipt of research funds. There was a discussion with the AHU and the RSIF coordinator and this was resolved. A copy of the grievance log which shows more details on grievances during the reporting period is attached as Annex 6.

3.5 Procurement

A total of thirty six (36) procurement activities have been undertaken for the period between January 2019 to December 2021. Of these, twenty three (23) are complete in terms of goods or service delivered, eight (8) activities are ongoing, mainly consultancies in progress and goods to be delivered, three (3) activities were cancelled due to change in scope of service or goods specifications and one (1) consultancy was terminated. One (1) procurement activity is at contracting stage. Details are included in Annex 7.

3.6 Key challenges during the period

- No-cost extension, while awaiting decision from WB on additional financing, means RSIF budget has limited scope to take on board new, not previously programmed activities.
- A number of cohort 1 students have been slightly delayed due to the covid challenges that led to laboratories and other research facilities being unusable during the pandemic. This has meant that additional stipends beyond the planned 24 months will have to be allocated.
- Most proposals to the Window 2 & 3 (Research and innovation grants) deemed in-eligible were either incomplete applications or were not from eligible applicants in line with the Call objectives. The RCU also noted the lower than anticipated number of proposals submitted to the Call especially for the innovation grants and to some thematic areas specifically the energy and minerals, mining and materials engineering. A special call will be prepared and shared and relevant capacity building activities implemented in support.

Request to EB:

- Noting that the current contributions from governments will not be affected by the discussion around charging of administrative fees, we request that agreement between *icipe* and PASET be finalised.
- Note the improvement in satisfaction by RSIF students to the support provided by the RSIF RCU.

3.7 RSIF Funds Allocation Report -Government Contributions (31st December 2021)

A total of US\$18, 447,474 has been received by RSIF as at 31 December 2021 from eight African Governments (Table 12). A detailed expenditure report is included as Table 13.

Table 12. RSIF African Government Contributions as at 31 December 2021 (*Amounts in USD*)

INCOME	Recipient	Description	Total
B8501G00001	icipe	Fund Balance received from AAU (Govts of Kenya & Rwanda)	3,413,977
B8501G00001	icipe	Funds received from Ivorian Govt	1,033,497
B8501G00001	icipe	Signed Agreement - Govt of Ghana	2,000,000
B8501G00001	icipe	Signed Agreement - Govt of Burkina Faso	2,000,000
B8501G00001	icipe	Signed Agreement - Govt of Senegal	2,000,000
B8501G00001	icipe	Signed Agreement - Govt of Benin	2,000,000
B8501G00001	icipe	Signed Agreement - Govt of Mozambique	6,000,000
		Total Income	18,447,474

Table 13: RSIF Funds Allocation Report – Government Contributions towards Scholarships (31st December 2021)¹

INCOME	Notes	Kenya	Rwanda	Côte d'Ivoire	Ghana	Burkina Faso	Senegal	Benin	Mozambique	TOTAL
Funds received or per signed agreement	A	1,979,177	1,963,292	1,033,497	2,000,000	2,000,000	2,000,000	2,000,000	4,000,000	16,975,966
Less: AAU Admin charges	B	131,105	130,387	-	-	-	-	-	-	261,492
Funds available for Scholarships	C =A-B	1,848,072	1,832,905	1,033,497	2,000,000	2,000,000	2,000,000	2,000,000	4,000,000	16,714,474
Scholarship Cost per student (4 years)	E	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	
Number of Scholarships Available	F=C/E	18	18	10	20	20	20	20	40	166
Allocation of Scholarships										
80% to Nationals	80% G	15	15	8	16	16	16	16	32	134
20% to Non Nationals	20% H	3	3	2	4	4	4	4	8	32
Scholarships Awarded										
Nationals	74% I	14	14	5	15	5	5	6	-	64
Non Nationals	26% J	5	3	2	3	3	3	2	-	21
Scholarships to Award										
Nationals	K=G-I	-	1	3	1	11	11	10	32	27
Non Nationals	L=H-J	-	-	-	1	1	1	2	8	3
Funds spent on Scholars										
By AAU	M	178,000	89,000	-	-	-	-	-	-	267,000
By Icipe	N	779,405	662,739	236,134	516,733	209,130	139,322	67,584	-	2,611,047
Fund Balance	O=C-M-N	890,668	1,081,166	797,363	1,483,267	1,790,870	1,860,678	1,932,416	4,000,000	13,836,427

¹ The total contribution from the Government of Mozambique is US\$6million with US\$2million towards RSIF Windows 2 & 3 on research and innovation grants. This table focuses on the contributions towards the RSIF Scholarships.

3.8 Key activities for the next quarter (January – March 2022)

1. Resource mobilization through business research and targeted outreach to potential funders of the RSIF General and Permanent Funds, including
 - Compilation of a list of philanthropists with an aim of reaching out to them
 - Sending letters to potential funders in the name of PASET Governing Council Chair
 - Follow up on positive responses emanating from the November 2021 pre-conference event and with Mastercard Foundation.
2. Continue with management of Cohorts 1-3 students
3. Finalise Cohort 4 Selection and initiate training for Cohort 4 students
4. Finalise mentorship platform
5. Publish 2nd Call for award of unallocated RSIF/MozSkills Research and Innovation Grants
6. Preparations for RSIF conference to be held in Morocco in 2022.
7. Advance in the processes related to award of research and innovation grants including RSIF/MozSkills, 2nd Round of grants
8. Publish the 1st Call for Research Grants Type 2, Junior Investigator Research Award (JIRA)
9. Upgrading RSIF communication materials and marketing in close collaboration with the contracted professional communication firm
10. Undertake annual audit.