



**PERIPERI U**

PARTNERS ENHANCING RESILIENCE  
FOR PEOPLE EXPOSED TO RISKS

**Annual Report for the Period  
26 May 2018 to 25 May 2019**

**25 June 2019**

**Research Alliance for Disaster Risk Reduction (RADAR)**

**Stellenbosch University**

**SOUTH AFRICA**

**<http://www.riskreductionafrica.org>**



**Report based on the  
REGIONAL DISASTER RISK AND VULNERABILITY REDUCTION CAPACITY  
DEVELOPMENT PROJECT  
(PERIPERI U)**

**RADAR  
Stellenbosch University  
ANNUAL REPORT FOR THE PERIOD  
26 MAY 2018 TO 25 MAY 2019**

**Funded through the Agreement No.:  
USAID AID-OFDA-G-16-00115**

**Sponsoring USAID Office:  
U.S. Foreign Disaster Assistance, Washington, DC**

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## EXECUTIVE SUMMARY

### Growth and Innovation in Capacity Building

In this third and final year of Periperi U's 2016-2019 USAID award<sup>1</sup> saw incredible growth, innovations and opportunities open for how partners enhance disaster risk (DR) related capacity building and training on the continent.

**Makerere** collaborated with the WHO to design and implement an all-hazard Rapid-Response Training short course in Uganda to strengthen detection and response to public health emergencies and potentially harmful events in the region. Partners also coordinated with the United Nations Development Programme (UNDP) and the World Health Organisation (WHO) to launch the first African Risk Methods School (ARMS), a summer school styled training event hosted by Ardhi University in Tanzania, hosting participants across academia, non-government organisations (NGOs), government organisations and United Nations personnel.

The consortium saw a significant rise in the number of students to a total of 2 199 across 19 disaster risk-related academic programmes, 25 modules (whose enrolment numbers almost tripled in this year), as well as hosting 13 short courses with 361 participants. There was also a significant rise in overall female representation across education and training activities, reaching 40% of total enrolment numbers for the first time.

Seven Periperi U partners revised existing disaster risk curricula or developed new integrated academic programmes, many which are set to be launched in the upcoming 2019/2020 academic year. Despite facing major disruption and political instability within their country, **UBuea** finally completed and launched its new MSc degree in Disaster Risk Management and Safety.

### Generating local and relevant risk knowledge

Periperi U faculty-led research collaborations continued with government, NGOs, international research groupings and international agencies, as well as among other Periperi U partners. These included a tracer study of the career paths of approximately 400 (primarily) Masters graduates from **ARU, BDU, Makerere, SU, Tanà** and **UDM** courses.

New Research projects among partners and international institutions include the assessment of the WFP's adapted Three-Pronged Approach programme to assess risk amongst, urban and displaced populations, as well as a World Bank project to assess and develop a framework to enhance capacity building across southern Africa.

From its students, 393 students across the partners undertook research for BSc, PGDip, Honours, Masters and PhD degrees, including 208 Masters projects and 25 PhD theses. When theses from across 2016-19 are included, an impressive 828 student theses have been undertaken across the partnership in just two years with 421 completed at the time of reporting.

### Advocacy, Engagement and Collaboration

Partners attended an estimated 90 strategic and technical engagement events such as meetings, conferences and consultations spanning from local to international scale attended by almost 8000

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<sup>1</sup> USAID award AID-OFDA-G-16-00115

people. In each instance, Periperi U participants were involved either as hosts, co-organisers, discussants, panellists, presenters, technical advisors, or had other specialist roles.

Major events during this period include partner participation at the Africa-Arab Regional Platform (AfARP) on Disaster Risk Reduction (DRR) in Tunisia and the 6th Global Platform for Disaster Risk Reduction (GPDRR) in Geneva Switzerland, in which the partners were able to engage with a multitude of stakeholders from across the globe as well as act as ambassadors for the consortium and advocates for African academia upon a global stage.

It was further underlined by a growing range of memoranda of understanding (MoU) between its partner universities and other scientific, governmental and international organisations such as the UNDP, WHO and World Food Programme (WFP).

### **A unified and committed Pan-African partnership**

Established in 2006, the Periperi U partnership has grown incrementally to include 12 African universities with a combined contingent of 245 staff engaged in research, training and project management. In this reporting period, the collaboration actively engaged the universities listed below:

- Bahir Dar University (Bahir Dar, Ethiopia)
- Built Environment Research Laboratory (LBE) University of Science and Technology Houari Boumediene (USTHB) (Algiers, Algeria)
- Disaster Management Training Centre (DMTC), Ardhi University (Dar Es Salaam, Tanzania)
- Research Alliance for Disaster & Risk Reduction University (RADAR)(Stellenbosch, South Africa)
- Makerere University (Kampala, Uganda)
- University of Ghana (Accra, Ghana)
- Universidade Técnica de Moçambique (UDM) (Maputo, Moçambique)
- Moi University (Eldoret, Kenya)
- Gaston-Berger University (St Louis, Senegal)
- Centre D'Etudes et de Recherches Economiques pour le Developpement (CERED), University of Antananarivo (Antananarivo, Madagascar)
- Ahmadu Bello University Center for Disaster Risks Management and Development Studies (Zaria, Nigeria)
- University of Buea (Buea, Cameroon)

Periperi U's secretariat, **RADAR/SU**, continued to oversee compliance with award terms and conditions. It disbursed USD 805 002.23 to 11 sub-awardees, as well as arranged and paid for 42 international flights. The secretariat maintained Periperi U's online platforms such as its website<sup>2</sup>, Facebook page<sup>3</sup> as well its online research centre (ORC)<sup>4</sup>, which recorded over 6 million searches, an increase of 237.8% since the previous annual report.

The consortium underwent a summative external evaluation of the partners during this 2016-2019 USAID award period, to analyse the progress of the consortium, its capabilities and strengths, and identify areas to be improved upon.

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<sup>2</sup> [www.riskreductionafrica.org](http://www.riskreductionafrica.org)

<sup>3</sup> <https://www.facebook.com/PERIPERIU/>

<sup>4</sup> [www.lib.riskreductionafrica.org](http://www.lib.riskreductionafrica.org)

Periperi U Annual Report 26 May 2018 – 25 May 2019

*Table 1: Summary of Periperi U Training/Education Efforts (26 May 2017 - 25 May 2018)*

Institution	Short Courses	Participants	Academic Progs/ Modules	Students Registered
ABU	0	0	5	461
ARU	4	121	3	31
BDU	0	0	4	258
GBU	1	36	1	84
Makerere	2	59	15	59
Moi	1	37	3	52
SU	1	9	5	36
Tana	1	65	4	576
UBuea	0	0	11	193
UDM	1	6	1	167
UG	1	13	4	138
USTHB	1	15	2	144
<b>Total</b>	<b>13</b>	<b>361</b>	<b>58</b>	<b>2199</b>

\* Programmes only

\*\*Modules only

\*\*\* Programmes and modules

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## ABBREVIATIONS AND ACRONYMS

### List of Partner Institutional Acronyms

<b>ABU</b>	Ahmadu Bello University, Nigeria
<b>ARU</b>	Ardhi University, Tanzania
<b>BDU</b>	Bahir Dar University, Ethiopia
<b>CERED</b>	Centre D'Etudes et de Recherches Economiques pour le Developpement
<b>GBU</b>	Gaston Berger University, Senegal
<b>Makerere</b>	Makerere University, Uganda
<b>Moi</b>	Moi University, Kenya
<b>RADAR</b>	Research Alliance for Disaster and Risk Reduction
<b>SU</b>	Stellenbosch University, South Africa
<b>Tanà</b>	University of Antananarivo, Madagascar
<b>UBuea</b>	University of Buea, Cameroon
<b>UDM</b>	Universidade Técnica de Moçambique, Moçambique
<b>UG</b>	University of Ghana, Ghana
<b>USTHB</b>	University of Sciences and Technologies – Houari Boumediene, Algeria

### General Abbreviations and acronyms

<b>3PA</b>	Three-Pronged Approach
<b>ACS</b>	Africa Centre for Scholarship
<b>AfARP</b>	African-Arab Regional Platform
<b>ARC</b>	African Risk Capacity
<b>ARMS</b>	African Risk Methods School
<b>ASTAG</b>	African Science and Technology Advisory Group
<b>AUC</b>	African Union Commission
<b>AWGDRR</b>	African Working Group on Disaster Risk Reduction
<b>AYAB-DRR</b>	African Youth Advisory Board on Disaster Risk Reduction
<b>BNGRC</b>	Bureau National de Gestion des Risques et Catastrophes
<b>BSc</b>	Bachelor of Science
<b>CERFE</b>	Le Centre de Recherche et de Formation en Eco-éthologie
<b>CBPP</b>	Community-based Participatory Planning
<b>CDC</b>	Centres for Disease Prevention and Control
<b>CDI</b>	Centro de Documentacao e Inovacao
<b>CNaPS</b>	National Social Security Fund
<b>CBPP</b>	Community-based Participatory Planning
<b>CRA</b>	Community Risk Assessment
<b>CSIR</b>	Council for Scientific and Industrial Research
<b>DFC</b>	Danida Fellowship Centre
<b>DGM</b>	General Directorate of Meteorology
<b>DIMSUR</b>	Disaster Risk Management, Sustainability and Urban Resilience
<b>DR</b>	Disaster Risk
<b>DREA</b>	Directorate of Rural Economy and Agriculture (African Union)
<b>DRM</b>	Disaster Risk Management

<b>DRM-SD</b>	Disaster Risk Management and Sustainable Development
<b>DRR</b>	Disaster Risk Reduction
<b>DRRS</b>	Disaster Risk Reduction Science
<b>ECCAS</b>	Economic Community of Central African States
<b>FATHUM</b>	Forecasts for Anticipatory Humanitarian Action
<b>FbF</b>	Forecast-based financing
<b>FOSS4G2018</b>	Free and Open Source for Geospatial 2018
<b>GIS</b>	Geographic Information Systems
<b>GMES</b>	Global Monitoring for Environment Security
<b>GNDR</b>	Global Network of CSOs for Disaster Reduction
<b>GPDRR</b>	Global Platform on Disaster Risk Reduction
<b>GRAF</b>	Global Risk Assessment Framework
<b>GTPS</b>	Social Protection thematic group
<b>HEI</b>	Higher Education Institution
<b>HOTSummit</b>	Humanitarian Open Street Map Summit
<b>HRST</b>	Human Resources in Science and Technology
<b>IFAD</b>	International Fund for Agricultural Development
<b>IFRC</b>	International Federation of Red Cross and Red Crescent Societies
<b>IPCC</b>	Intercontinental Panel on Climate Change
<b>IRD</b>	Institute de Recherche pour le Development
<b>ISBN</b>	Sugarcane Bioenergy for Sustainable Development
<b>ISC</b>	International Science Council
<b>MA</b>	Master of Arts
<b>MCTESTP</b>	Ministry of Science and Technology, Higher Education and Technical Professional
<b>MDRM</b>	Master of Disaster Risk Management
<b>MoU</b>	Memorandum of Understanding
<b>MPhil</b>	Master of Philosophy
<b>MPPSPF</b>	Ministry of Population, Social Protection and Women Promotion
<b>MSc</b>	Master of Science
<b>MSc. DRM</b>	Master of Science in Disaster Risk Management
<b>MUST</b>	Malawian University of Science and Technology
<b>NADMO</b>	National Disaster Management Organisation
<b>NEMA</b>	Nigerian Emergency Management Act
<b>NEPAD (ARCH)</b>	New Partnership for Africa's Development (Africa Resilience Centre Hub)
<b>NGO</b>	Non-governmental organisations
<b>NIPA</b>	National Information Technology Industry Promotion Agency
<b>NSF</b>	New Shape Forum
<b>NUST</b>	National University of Science and Technology
<b>OFDA</b>	Office of Foreign Disaster Assistance
<b>ORC</b>	Online Resource Centre
<b>PARM</b>	Platform for Agricultural Risk Management
<b>PDF</b>	Portable Document Format
<b>PDNA</b>	Post Disaster Needs Assessment
<b>PGDip</b>	Post Graduate Diploma

<b>PhD</b>	Doctor of Philosophy
<b>RRT</b>	Rapid Response Team
<b>SANWACTE</b>	Southern African Network of Water Centres of Excellence
<b>SSAG</b>	Society for South African Geographers
<b>STAG</b>	Science and Technology Advisory Group
<b>TCU</b>	Tanzania Commission for Universities
<b>UK</b>	United Kingdom
<b>UNDP</b>	United Nations Development Programme
<b>UNICORE</b>	Uniform Interface to Computing Resources
<b>UNISDR/UNDRR</b>	United Nations Office for Disaster Risk Reduction / United Nations Disaster Risk Reduction
<b>UNMGCY</b>	United Nations Major Group for Children and Youth
<b>USAID</b>	United States Agency for International Development
<b>WFP</b>	World Food Program
<b>WHH</b>	Welt Hunger Hilfe
<b>WHO</b>	World Health Organisation

## 1. PROGRESS OVERVIEW

This report describes the activities and progress of the third year of Periperi U's 2016-2019 USAID award<sup>5</sup> from 26 May 2018 – 25 May 2019. This year saw incredible growth, innovations and opportunities open for how partners enhance disaster risk (DR) related capacity building and training on the continent.

This was reflected in the launch of the first African Risk Methods School (ARMS), a collaborative summer school styled training event, jointly convened by Periperi U, the United Nations Development Programme (UNDP) and the World Health Organisation (WHO) hosted in Tanzania. This pilot training event hosted a mixture of 36 participants across academia, non-government organisations (NGOs), government organisations and United Nations personnel from across 12 countries.

The consortium saw a significant rise in the number of students to a total of 2 199 across 19 disaster risk-related academic programmes and 25 modules (whose student numbers almost tripled in this year). There was also a rise in female student representation, reaching 40% of the total student number for the first time.

Seven Periperi U partners revised existing disaster risk curricula or developed new integrated academic programmes, many of which are set to be launched in the upcoming 2019/2020 academic year. UBuea finally completed and launched its new MSc degree in Disaster Risk Management and Safety, despite major disruption and political instability within the country.

In addition to its formal academic programmes and modules, Periperi U delivered 13 short courses that reached 361 people, including 154 women (42.7%). Of these, 17 (77%) of this year's courses were 'custom-made' or designed and implemented specifically for an institution, organisation or government partner – mostly at the sub-national level.

Partners attended an estimated 90 strategic and technical engagement events such as meetings, conferences and consultations spanning from local to international scale attended by almost 8 000 people. In each instance, Periperi U participants were involved either as hosts, co-organisers, discussants, panellists, presenters, technical advisors, or had other specialist roles. Major events during this period include partner participation at the Africa-Arab Regional Platform (AfARP) on Disaster Risk Reduction (DRR) in Tunisia and the 6th Global Platform for Disaster Risk Reduction (GPDRR) in Geneva Switzerland, in which the partners were able to engage with a multitude of stakeholders from across the globe as well as act as ambassadors for the consortium and for African academia upon a global stage.

It was further underlined by a growing range of memoranda of understanding (MoU) between its partner universities and other scientific, governmental and international organisations such as the UNDP, WHO and World Food Programme (WFP).

As Periperi secretariat, **RADAR/SU** oversaw compliance with award terms and conditions. It prepared and submitted advance requests to USAID/OFDA that resulted in the disbursement of USD 805 002.23 to 11 sub-awardees, as well as arranged and paid for 42 international flights. The secretariat also

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<sup>5</sup> USAID award AID-OFDA-G-16-00115

oversaw extensive administrative and logistics arrangements for Periperi U's annual consultative meeting in October 2018 in Tunisia.

As Phase IV of the Periperi U project comes to a close, a summative external evaluation was conducted to analyse the progress of the consortium, its capabilities and strengths, and identify areas to be improved upon.

This annual report is organised into six parts. Sections 2 and 3 detail the accomplishments within each sub-sector and their respective focus areas while Section 4 reports on Secretariat support to the initiative. Section 5 revisits key programmatic constraints encountered during this period, while Section 6 concludes the report.

## 2. PROGRESS UPDATE: GLOBAL ADVOCACY & ENGAGEMENT IN DRR

### 2.1 Overview

During the 2018 – 2019 reporting period, Periperi U continued to advance global and continental awareness of the role higher education institutions (HEIs) play in advancing DRR. This along with mobilising material support to better enable HEI engagement, particularly in at-risk developing countries. The partnership's efforts during this past year proved crucial for enabling closer engagement between Africa's higher education enterprise and stakeholders from local to global scales. Materially, consortium members (individually and collectively) participated in nine regional, continental and international events, involving a total of +5000 people. These included two instances in Africa where Periperi U co-organised and facilitated consultations and conference sessions at both continental and regional scales.

### 2.2 Increasing recognition and engagement of African Academics across all scales

There has been increasing recognition of the capacity and expertise of African academics, particularly those from Periperi U, within the disaster risk field. Partners of the consortium were invited to attend several meetings and groups, presenting opportunities to further engagement and strengthen collaboration between academia and global and continental stakeholders.

From 5-6 February 2019, representatives from **SU** and **Makerere** attended a WFP meeting in Rome. Here, they advocated for the inclusion of academia within the piloting of the proposed adapted version of the Three-Pronged approach (3PA) to be applied to assess vulnerability and resilience within urban, displaced and refugee settings. They urged WFP to draw on the local expertise, knowledge and networks of researchers and academics from higher education institutions across the continent to assist in conducting research and analysis within the relevant countries for the 3PA pilot. They further underlined that African academics and HEIs should be engaged as equal partners in the pilot process, rather than subcontractors, 'token' partners or a source of affordable local labour to carry out research on their behalf. Rather HEIs should be recognized as equal partners in knowledge generation and valued for their insight and expertise concerning local risk issues.

At a continental scale, staff from the Periperi U partners were invited to apply to become members of the newly established African Science and Technology Advisory Group (A-STAG) and the Africa Youth Advisory Board on Disaster Risk Reduction (AYAB - DRR) for the implementation of the DRR in Africa.

Four Periperi U staff (from **BDU**, **Tanà**, **UBuea** and **USTHB** - as seen in table 2) were selected to be members of the A-STAG to serve on a voluntary basis to provide their scientific expertise and guidance towards DRR initiatives and policies undertaken by the African Union Commission (AUC), Regional Economic Communities and AUC Member States. What is more, three of the partners were elected to hold executive committee positions, including Chairperson of the A-STAG group held by Prof Djillali Benouar of **USTHB**.

Two young staff from **SU** and **Tanà**, as well as a former student from UG, were selected to be members of the AYAB - DRR. The role of the AYAB members will be to champion the capacity building of African youth, design of youth sensitive policies, implementation, monitoring and review of DRR within Africa across continental, regional, national and local levels. A core priority of the AYAB set out by the AUC is to engage with Periperi U partners to facilitate capacity building initiatives and increased collaboration and exchange between young African scientists and practitioners in the field of DRR.

*Table 2: Periperi U representation on ASTAG and AYAB*

Name	Partner	Group & position
Aina Andrianjakatina	Tanà	AYAB - Southern Africa Representative
Alberto Francioli	SU	AYAB - Southern Africa Representative
Djillali Benouar	USTHB	A-STAG - Chairperson
Holimalala Randriamanampisoa	Tanà	A-STAG - Communication /Resources Mobilisation
Samuel Ayonghe	UBuea	A-STAG - Central African Representative
Tarekegn Yehuala	BDU	A-STAG - Secretary

### 2.3 Advocacy for Higher Education Institutions at Strategic Platforms

Periperi U partners attended several major strategic engagements in which they actively advocated for the importance of including HEIs in advancing DRR and calling for greater investment and support for their research and capacity building activities.

At the global level, Periperi U’s coordinator participated in the United Nations Office for Disaster Risk Reduction’s (UNISDR<sup>6</sup>) Global Science and Technology Advisory Group (STAG) meeting, convened from 30-31 August 2018 in Geneva, Switzerland. This provided an opportunity to give feedback on the tracer study findings for graduates of new cross-disciplinary disaster risk-related programmes in Africa.

At the continental level, from 4-5 September, Periperi U’s **UBuea** focal point, Prof Samuel Ayonghe, represented the consortium at the Africa Working Group on Disaster Risk Reduction (AWGDRR) convened in Yaoundé, Cameroon. He participated in a working group focused on multi-hazard early warning and response, as well as DRR in fragile and/or conflict-affected contexts. In his presentation to the AWGDRR, he stressed the importance of both investing in DRR education and research among HEIs. He also foregrounded the need for employment opportunities for DRR graduates within their own countries to address DR-related issues.

From 9 – 13 October, representatives from each of the partners attended the AfARP on DRR in Tunis, Tunisia. The Platform's theme was “Towards Disaster Risk Informed and Inclusive Sustainable

<sup>6</sup> Renamed UNDRR (United Nations Office for Disaster Risk Reduction) as of 4 May 2019

Development”. In addition to supporting their national delegations and other regional stakeholders, Periperi U members made five key interventions:

- On the morning of 09 October, Periperi U members co-facilitated a session with the AUC entitled “*Transforming the Africa regional Science and Technology partnership into regional STAG in support of the implementation of the **Science and Technology Roadmap to Support the Implementation of the Sendai Framework.***” This session included inputs from UNISDR AUC-DREA<sup>7</sup>, AUC-HRST<sup>8</sup>, International Science Council (ISC) and the presentation of draft terms of reference.
- On the morning of 10 October, Periperi U hosted a side event entitled “*Science and Technology, and Academic Community – Africa*”. The session was chaired by Prof Edwin Iguisi of **ABU** with presentations by Sandra Kemeh (UNMGCY<sup>9</sup>), Prof Djillali Benouar (**USTHB**) and a joint presentation by Ngoy Nsenga (WHO) and Inger Harber (**SU**).
- Professor Mateugue Diack of **UGB** represented Periperi U as a member of the Tunis Declaration drafting committee.
- **SU/RADAR**’s Director participated in the panel during Working Session 6 entitled “*Partnership for DRR: Catalysing Sendai Framework implementation through enhanced (Africa-Arab) partnerships and collaborations: regional, sub-regional and national perspectives.*”
- On 13 October, the Scientific, Technology and Academic Community statement was presented by Kenza Beldjilali from **USTHB**, marking the bridge between the African and Arab regions and symbolising the potential for trans-national/trans-regional efforts to address risk across both regions and people.

A significant issue raised in this statement was to advance disaster risk governance and invest and strengthen skilled human capital for DRR and resilience. A key to building and strengthening capacity would be to develop new DR-related curricula as well as explore innovative teaching methods including online learning and distance education. The statement also advocated for strengthening synergies between Disaster Risk Management (DRM) structures and Ministries of Higher Education as well as Ministries of Science and Technology to promote improved DR governance.

From 1 – 4 November, the Secretariat/SU’s director attended the ‘Regional Workshop Strengthening Empowering and Mobilising Youth and Young Professionals in Science, Engineering, Technology and Innovation for DRR in Asia and the Pacific’ hosted by UNESCO. She spoke about the experiences and success of the partners contributing towards local DR-related knowledge generation and capacity development on the continent. Drawing on recent data gathered on the career paths of Periperi U students, she spoke of the influence these graduates have had contributing towards enhancing resilience and DRR initiatives at local and national levels across their respective countries.

Between 13 -17 May 2019, representatives from each of the partners (excluding **Makerere**, who were unable to acquire a Visa in time to travel) attended the sixth GPDRR in Geneva, Switzerland. The presence of the 15 strong Periperi U team of African academics foregrounded the growing capability

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<sup>7</sup> African Union Commission Directorate of Rural Economy and Agriculture

<sup>8</sup> African Union Commission Human Resources in Science and Technology

<sup>9</sup> United Nations Major Group for Children and Youth



of Africa to advance its own DR-related research and capacity in this field - and to reinforce this with the public officials (especially from their own countries) who were attending the GPDRR.

**SU/RADAR**'s director participated on a panel titled 'Science and Policy dialogue: The case for better data' in which she spoke about the research findings of a survey undertaken by the Working Group 4 of the Global STAG conducted concerning the role of higher education in advancing skilled capacity in this domain. She highlighted several issues apparent within DRR education and training institutions, including limited financial support for students and programmes, lack of female representation both at student and lecturer levels, as well as an absence of social sciences and humanities.

A paper titled "Beyond fragility: Advancing skilled human capital for disaster risk reduction and resilience in Africa" was contributed to the GAR 2019 which was launched at the GPDRR. The paper related to research undertaken by **ARU, BDU, Makerere, SU, Tanà** and **UDM** of the career paths of approximately 400 (primarily) Masters graduates from their DR-related academic programmes. The paper sought to critically examine whether purposeful investments in high-value disaster risk-related human capital and human resources, such as investing in DR related education and training, enable progress towards strengthened risk reduction capability at national and subnational levels.

Several Periperi U partners (particularly those also on the ASTAG) attended the Africa State Consultation, a major side event forum at the GPDRR, to discuss challenges and opportunities to DRR the continent. **USTHB**'s Periperi U representative put forward a proposal that encouraged greater emphasis on DR-related education and training as well as the involvement of African HEIs in capacity building, research and consultancy to advance DRR initiatives and capabilities across the continent.

Periperi U Members from the AYAB participated in several youth related sessions and panels, discussing their experiences and providing suggestions for enhanced engagement between youth groups and educational institutions to promote awareness and capacity building in DRR.

### **3. PROGRESS UPDATE: INTEGRATION/ENHANCEMENT OF DRR WITHIN EDUCATION AND RESEARCH PROGRAMMES.**

#### **3.1 Overview**

Periperi U efforts within this sub-sector sought to enhance HEI DRR efforts through five interlinked strategies. These included improving the consortium's collective effectiveness, its continued expansion and advance DR related educational activities across the continent. At the level of individual partners, they included actions to better institutionally embed DRM capacity building and research, combined with the expansion of the core disaster risk academic activities within their base universities. The fifth component comprised a deliberate focus on strategic engagements and collaborations multiple stakeholder groups across local, regional and international scales.

#### **3.2 Advancing consortium effectiveness and expansion**

During the 2018-2019 reporting period, Periperi U's reach and stability at consortium-scale were enabled by streamlined systems for managing sub-recipient awards as well as complex performance and financial reporting. With specific respect to consortium expansion, as foreseen in the initial planning for Phase IV, formal consortium membership did not increase during this annual reporting

period. The 12 consortium members do, however, have working relationships with 20 other African universities (please see Table 3). These working relationships both support and enhance the consortium, amplifying its impact across the continent.

From October 2018 until April 2019, a summative external evaluation was conducted of Periperi U Phase IV. The evaluation process was wide-ranging and included consultation between the evaluation team and consortium members at Periperi U's Annual Consultative Meeting in Tunis, Tunisia. This initial meeting sought to outline the evaluation scope and establish points of contact. The evaluation process also included a multifaceted methodology that involved interviews with both partners and key stakeholders, as well as an in-depth analysis of quarterly quantitative and other data provided by the secretariat. This comprehensive report may be accessed online at the [Periperi U website; riskreductionafrica.org](http://www.riskreductionafrica.org)<sup>10</sup>.

### 3.3 Strategic scaling-up of DRM/DRR educational activities across Africa to extend capacity-building, technical support and disaster risk research services.

This reporting period saw the Periperi U both develop grow its existing collaborations with African HEIS as well as trialling new platforms such as the summer school styled sessions, to expand and enhance DR related educational activities across the continent.

#### 3.3.1 Extending Periperi U to include other African HEIs and Institutions

In late March 2019, the consortium confirmed involvement in two World Bank projects geared towards enhancing capacity building and training in DRR.

- i) Periperi U partners were awarded a project titled 'Strengthening the DRR Coordination Planning and Policy Advisory Capacity of the Southern African Development Community'. The secretariat/SU along with Periperi U partners based at **ARU**, **Tanà** and **UDM**, will work alongside academic units based at other African HEIs, including the National University of Science and Technology (NUST) in Zimbabwe and the Malawi University of Science and Technology (MUST), as well as the African Union Commission (AUC) / New Partnership for Africa's Development (NEPAD) Southern African Network of Water Centres of Excellence (SANWATCE), to conduct this project.

The project seeks to facilitate action research related to regional DRR policies in Southern Africa and support capacity building for regional experts, media, legislature, civil society organizations and the private sector to better contribute in the implementation of DRR activities in Southern Africa. Specific objectives to achieve this goal are to a) Support the establishment of a regional applied research and capacity building network on DRM in Southern Africa; b) Provide guidance, based on global best practice, on standardization and harmonization of continued education programs for DRR in Southern Africa; and c) Facilitate short term exchanges of academics and researchers.

- ii) **SU** and **Tanà** are also involved in second World Bank project, developing a 'Disaster Risk Finance Capacity Building Program for Africa'. This collaboration aims to develop a Disaster Risk Finance themed training course targeted towards senior officials from Ministries of

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<sup>10</sup> [http://www.riskreductionafrica.org/assets/files/PeriperiU\\_Phase%20IV\\_Evaluation\\_Report\\_.pdf](http://www.riskreductionafrica.org/assets/files/PeriperiU_Phase%20IV_Evaluation_Report_.pdf)

Finance from across the African continent. It specifically intends to enhance understanding of DR financing strategies and instruments for protection from (natural) disasters that are embedded in the broader DRM and fiscal risk management frameworks, and build the skill sets to design and implement such strategies.

Periperi U partners continued to collaborate and develop their relationships with other African HEIS at local and regional scales. Such collaborations, which are listed in table 3 below, include conducting joint research, support development and implementation of academic programmes and activities, and perform community outreach.

**UDM** signed an MoU with Maragra Açucar SA, in which the two institutions recognised the role of Science, Technology and Innovation in developing modern societies. Key objectives of the MoU include developing and promoting practical-laboratory classes, scientific research and innovation, holding of symposia, colloquia, workshops, training and providing opportunities for students from **UDM's** 'Environmental Engineering and Disaster Management' to be placed in internships at Maragra Açucar SA production centres.

*Table 3: Illustrative list of collaborations between Periperi U partners and other African universities between 26 May 2018 - 25 May 2019*

Periperi U Partner	Collaborating HEIS	Nature of Collaboration
<b>ARU</b>	Dodoma University, Dodoma, Tanzania	Collaboration on internships & field placements
<b>BDU</b>	Ambo Univ., Arba Minch Univ., Debratabor Univ., Gambella Univ., Gondar Univ., Jigjiga Univ., Semera Univ., Addis Ababa Univ., Mekele Univ., Hwasa Univ.	Established national network to share DRM curricula and work with other stakeholders.
<b>GBU</b>	Univ. Abou Mouny, Niamey, Niger; Univ. Nazi Boni, Bobo-Dioulasso, Burkina Faso Univ. Ndjamen, Chad Univ. Cheikh Anta Diop, Dakar, Senegal	Specific focus on agricultural risk management and prevention/mgmt. of food insecurity risks, building on GBU's experience.
<b>UBuea</b>	Univ. Yaounde 1, Univ. Yaounde 2, Cameroon	Collaboration on joint research, engagements on short courses, workshops, community outreach, teaching programmes, and supervising and examining master's theses
<b>UDM</b>	Universidade Pedagógica – Delegação da Beira Universidade Católica de Moçambique	MoUs signed to make DRM short courses & programmes accessible to more remote areas of Mozambique

### 3.3.2 African Risk Method School (ARMS)

A key activity for Periperi U during this reporting period was the preparation and implementation of the first Periperi U ‘African Risk Methods School’ (ARMS I), a summer school-styled event which was hosted at **ARU** in Dar es Salaam between 10 -22 September. ARMS I was a collaborative effort, jointly convened by Periperi U, the UNDP and the WHO. Teaching staff were drawn from UNDP, WHO and six African Universities (**Ardhi University, Bahir Dar University, Makerere University, Stellenbosch University, Gaston Berger Université** and **University of Buea**). Staff from both **ARU** and the Periperi U secretariat managed the day-to-day logistics and coordination of ARMS I, including registration, documentation preparation and certification.

As shown in Figure 1, The School took place over a two-week period, with seven courses offered across four streams. As each course was full-time for the week it was scheduled, participants could only take one course per week. The courses drew on contemporary disaster risk theory and grounded application, with the aim to build ‘future-ready’ DRR skillsets that are interdisciplinary, applicable and integrated, and which respond to Africa’s fast-changing disaster risks.

Risk Methods Stream	Week One 10 – 14 September	Week Two 17 – 21 September
<b>Investigating Africa’s Urban Risks: Geospatial applications</b>	Assessment and Mapping of Urban Risks in Africa: Introduction to GIS & urban risk	Understanding & Managing African Urban Risks: Advanced Geospatial Analysis
<b>Probing Risk and Vulnerability in the Health Sector</b>	Integrated qualitative methods for disaster risk research in the health sector	Vulnerability and Risk Assessment in the health sector
<b>Integrated Research Methods in Disaster Risk and Resilience Studies</b>	Introduction to integrated research methods in disaster risk and resilience studies	Advanced research methods for disaster risk and resilience studies
<b>Specialised Post-Disaster Research Methods</b>	N/A	Post-Disaster Needs Assessment (PDNA) Methodology and Disaster Recovery Framework

*Figure 1: Outline of the Risk Method School programme and course titles*

Overall, 36 participants attended the School, 32 of whom attended both weeks of classes. Approximately half of the participants were Tanzanian-based students, with the other half representing 10 other countries<sup>11</sup>. Most ARMS I participants came from academia, including postgraduate students and/or lecturers from HEIs across the continent. Other participants came from the Uganda Red Cross, the WFP, and the AUC/NEPAD SANWACTE.

Courses in the two-week ‘Urban Risk and GIS’ stream were developed and taught by staff at **ARU** who specialise in applying GIS and remote sensing tools for assessing risk and vulnerability. In addition, in Week One, **Makerere** delivered a course on integrated qualitative methods for disaster risk research in the health sector. In the second week, this was followed by “Vulnerability and Risk Assessment in

<sup>11</sup> Cameroon, Ethiopia, Ghana, India, Italy, Kenya, Malawi, Senegal, South Africa, Tanzania, Uganda

the Health Sector, a joint collaboration between **Makerere, ARU** and WHO. The ‘integrated disaster risk research methods’ stream drew teaching staff from across four Periperi U members – **SU, UBuea, UGB** and **BDU**, with **SU's** Africa Centre for Scholarship (ACS), providing additional expertise in the second week. In parallel, UNDP colleagues taught its ‘Post Disaster Needs Assessment’ (PDNA) course in the second week.

Feedback from the ARMS I participants was very positive, acknowledging the expertise of lecturers and course organisation. Students commented on the richness of the opportunities provided within classes between participants as well as between participants and facilitators. Due to the intense nature of such short courses, and the incredible richness of the opportunity provided by a cross-cutting staff, several students noted that the courses could be extended, and the School hosted for an additional 1-2 weeks.

### 3.4 Institutional embedding of DRM academic activities and staffing expansion

#### 3.4.1 Ensuring programme quality and enabling institutional arrangements

##### *Institutional capacity building*

Periperi U partners actively seek out opportunities for staff capacity development. During this reporting period, 23 staff took part in specialised training courses to expand their skillsets and professional capacities.

The value of these human capital investments was clearly exemplified this past reporting period by **UBuea's** Periperi U project manager's participation in a Volcano Monitoring Training Course at the Centre for the Study of Active Volcanoes in Hilo, Hawaii and Vancouver, Washington, USA (from 27 May – 21 July 2018). The course's timing (fortuitously) coincided with Mount Kilauea's most recent eruption and ongoing volcanic activity (since April 2018). Not only has this experience provided **UBuea's** project manager with an opportunity to monitor and study an active volcano, but also given her the chance to observe first-hand the emergency response to the eruptions (including the evacuations of hundreds of local residents).

Between August - October four junior **UDM** risk researchers and lecturers participated in an internal training course on developing their GIS and statistical analysis capabilities. From 19 - 27 August, the **UG** Project manager participated in a drone training workshop hosted by the Danida Fellowship Centre (DFC) in Denmark. The training was part of a DFC funded project on “Climate Change Resilience in Urban Mobility of Accra, Ghana”, focused on how to use aerial drones to effectively map flood-prone areas in urban settings.

In September 12 Periperi U staff members attended ARMS I to advance their knowledge of risk from different fields and perspectives. Table 4 shows Periperi U staff participation in the different ARMS courses. Between 12 -17 November, staff from **ARU, BDU, Makerere, Moi** and **GBU** attended **SU's** Community Risk Assessment (CRA) short course to develop their skills in community-based participatory methods for data collecting and assessing risk. The course's training included conducting an actual risk assessment in an informal community, engaging with local residents to identify and assess risks. Between 5 - 19 January, three staff members from **Makerere** and **BDU**, travelled to South Africa to attend the African Doctoral Academy at Stellenbosch University. The **Makerere** staff took

two, week-long courses, the first which focussed on methods for teaching and supervising students at postgraduate levels, while the second focused on a diversity of methodologies and tools that could be used to conduct research and analyse data. Birhanu Gedif of **BDU** attended “Introduction to quantitative research design and methodology” during week 1 and “Mixed Methods in Research Design” during week 2 as well as “Grant writing fundamentals” during the weekend between. Participants shared very positive feedback about the ADA courses.

*Table 4: Periperi U sponsored staff participation in ARMS courses (10 – 21 September 2018)*

Staff Attendees	Week One	Week Two
ARU 1	Assessment and Mapping of Urban Risks in Africa: Introduction to GIS & urban risk	PDNA Methodology and Disaster Recovery Framework
ARU 2	Assessment and Mapping of Urban Risks in Africa: Introduction to GIS & urban risk	Understanding & Managing African Urban Risks: Advanced Geospatial Analysis
ARU 3	Assessment and Mapping of Urban Risks in Africa: Introduction to GIS & urban risk	Understanding & Managing African Urban Risks: Advanced Geospatial Analysis
BDU 1	Assessment and Mapping of Urban Risks in Africa: Introduction to GIS & urban risk	Understanding & Managing African Urban Risks: Advanced Geospatial Analysis
BDU 2	Assessment and Mapping of Urban Risks in Africa: Introduction to GIS & urban risk	Understanding & Managing African Urban Risks: Advanced Geospatial Analysis
GBU 1	N/A	PDNA Methodology & Disaster Recovery Framework
Makerere 1	Integrated qualitative methods for disaster risk research in the health sector	Vulnerability and Risk Assessment in the health sector
Makerere 2	Integrated qualitative methods for disaster risk research in the health sector	Vulnerability and Risk Assessment in the health sector
Moi 1	Assessment and Mapping of Urban Risks in Africa: Introduction to GIS & urban risk	N/A
Moi 2	Introduction to integrated research methods in disaster risk & resilience studies	Advanced research methods for disaster risk and resilience studies
UG 1	Introduction to integrated research methods in disaster risk & resilience studies	PDNA Methodology and Disaster Recovery Framework
UG 2	Integrated qualitative methods for disaster risk research in the health sector	Vulnerability and Risk Assessment in the health sector

***Institutional transitions for greater interdisciplinary scholarship***

**BDU** is still in the process of establishing a satellite Campus in Addis Ababa. This process was significantly delayed because of the political turbulence that impacted the country and its public institutions which only ended in July 2018.

The partners based at **UDM** institutionally relocated from the Faculty of Engineering to the Centro de Documentação e Inovação (CDI), a research-based institution within the university. The partners also underwent a physical relocation, moving into new offices and classrooms, providing space for **UDM** staff as well as classrooms for academic teaching and short courses.

This period also saw the departure and transition of major core staff members within the consortium. At **UG** saw the retirement of its project coordinator, Dr Songsore in August 2018, to be succeeded immediately by **UG's** new project coordinator, Associate Professor Martin Oteng-Ababio. On 23 November 2018, Professor Mateugue Diack, **GBU's** Periperi U focal point, suddenly passed away. Since his passing, **GBU** has established a temporary five-person committee to take on and share Professor Diack's roles and responsibilities to ensure continuity of its Periperi U activities.

In a further transition, from March 2019, **SU/RADAR's** director took up an appointment elsewhere. Since then, she has played a transitional, part-time, remote role in a reduced capacity while a new director is identified.

### 3.4.2 Consortium staffing

During this reporting period, there were 245 staff contributing to teaching and research activities across the partnership. Table 5 shows the distribution of Periperi-U engaged teaching/supervision, research and administrative support staff. Overall partner staffing levels remained consistent with the previous year, except for **Makerere**, where staff numbers shifted from a low of 16 to a high of 36. This was attributed to drawing in internal staff from other departments of the University to contribute towards teaching and research activities particularly between January – May 2019.

*Table 5: Staffing distribution by gender among Periperi U partners between 26 May 2018 - 25 May 2019*

Institution	Periperi U faculty			Contributing staff (Internal)			Contributing staff (External)			Total		Total staff
	F	M	Tot	F	M	Tot	F	M	Tot	F	M	
<b>ABU</b>	-	4	<b>4</b>	2	24	<b>26</b>	-	-	-	<b>2</b>	<b>28</b>	<b>30</b>
<b>Ardhi</b>	1	6	<b>7</b>	1	4	<b>5</b>	3	3	<b>6</b>	<b>5</b>	<b>13</b>	<b>18</b>
<b>BDU</b>	4	24	<b>28</b>	-	-	-	-	-	-	<b>4</b>	<b>24</b>	<b>28</b>
<b>GBU</b>	1	17	<b>18</b>	3	4	<b>7</b>	-	10	<b>10</b>	<b>4</b>	<b>31</b>	<b>35</b>
<b>Ghana</b>	-	6	<b>6</b>	1	1	-	1	1	<b>2</b>	<b>2</b>	<b>8</b>	<b>10</b>
<b>Makerere</b>	1	2	<b>3</b>	11	16	<b>27</b>	1	9	<b>10</b>	<b>13</b>	<b>27</b>	<b>40</b>
<b>Moi</b>	7	-	<b>7</b>	-	-	-	1	3	<b>4</b>	<b>8</b>	<b>3</b>	<b>11</b>
<b>SU</b>	8	3	<b>11</b>	-	-	-	-	-	-	<b>8</b>	<b>3</b>	<b>11</b>
<b>Tana</b>	2	5	<b>7</b>	5	5	<b>10</b>	-	-	-	<b>7</b>	<b>10</b>	<b>17</b>
<b>UBuea</b>	2	3	<b>5</b>	-	1	<b>1</b>	2	-	<b>2</b>	<b>4</b>	<b>4</b>	<b>8</b>
<b>UDM</b>	2	4	<b>6</b>	1	12	<b>13</b>	-	3	<b>3</b>	<b>3</b>	<b>19</b>	<b>22</b>
<b>USTHB</b>	2	3	<b>5</b>	2	1	<b>3</b>	1	6	<b>7</b>	<b>5</b>	<b>10</b>	<b>15</b>
<b>Total</b>	<b>30</b>	<b>77</b>	<b>107</b>	<b>26</b>	<b>68</b>	<b>94</b>	<b>9</b>	<b>35</b>	<b>44</b>	<b>65</b>	<b>180</b>	<b>245</b>

Most partners have a relatively small 'core' staffing complement (most having under 10), with partners such as **ABU** and **Makerere** and **UDM** drawing on contributing staff to support their academic activities. These high numbers of non-permanent contributing staff (56.3% of total) undermines the capacity of partners to develop new cross-disciplinary academic programmes that require applied expertise. Consequently, the implementation of teaching and research for such complex programmes places heavy course coordination demands on core academic and administrative staff.

Unfortunately, the partners continued to struggle to achieve more balanced gender representation with less than one-third of all core staff members (30 out of 107 core staff), and only 26.5% of the entire staff complement (65 out of 245 staff). Only **Moi**, **SU** and **UBuea** being the only partners to have 50% or more of the staff identify as female.

### 3.5 Establishment and/or enhancement of core disaster risk academic activities in each partner, including academic programmes, short courses, risk research and outreach

#### 3.5.1 Overview

Since its inception in 2006, Periperi U has underlined the importance of aligning disaster risk-related capacity building with the core academic activities of teaching, research and outreach. The consortium has also explicitly emphasised the importance of social responsiveness, given the high levels of risk faced across the continent. To optimise their reach and impact, Periperi U partners aim to provide an interlinked activity portfolio that includes disaster risk-related academic programmes, practitioner short courses risk research and outreach.

#### 3.5.2 Academic programmes and modules

During this reporting period, the number of students enrolled Periperi U academic programmes and courses increased to incorporate an estimated 2 199 students enrolled across 19 disaster risk-related academic programmes and 25 modules. A breakdown of the number of students per programme and per module can be found in table 6 and 7.

The greatest increase in student numbers was experienced among the partner's academic modules which almost tripled in size since the previous annual report. Partners such as **Makerere**, **Moi** and **UBuea** saw their module enrolments double during this period, while **Tana's** undergraduate and honours modules saw explosive growth from 77 and 10 students to 430 and 84 students respectively. Such dramatic changes perhaps demonstrate the growing interest of DRR among students focussing in other fields as well as broadening the reach and integration of the DR field to other disciplines such as engineering, economics, health, architecture, social sciences etc.

During this period, 221 students graduated from programmes across the partnership<sup>12</sup>. Unfortunately, there were 145 students, particularly from **ABU** and **BDU**, reported as either failing or dropping out of programmes. Many partners cited that financial constraints, work obligations and personal commitments caused many students to struggle to complete their studies, forcing them to postpone them and dropout of the programmes.

It is important to note that for the first time, female representation across Periperi U programmes and modules reached 40%. However, female representation does vary significantly across individual partners and their programmes and modules, for example, 64.3% and 68% of students enrolled at **SU** and **UDM** were female. Female representation also appears to be much higher among undergraduate programmes and modules at **BDU**, **Moi**, **UBuea** and **UG**. Unfortunately, as shown in Table 8, females make up only 26.7% of the postgraduate students across the consortium, revealing a lack of accessibility for African women students who pursue DRM-related university qualifications.

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<sup>12</sup> Please note that only students graduating from Partner programmes are counted as other students may take partner modules but graduate with a different degree.



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Table 6 Students registered in under- and post-graduate disaster risk-related programmes between 26 May 2018 - 25 May 2019

	Current Academic Programme/s	Level	Year 3: 2018/19														
			New			Existing			Graduated			Drop-out /failed			Total		
			M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot	M	F	Tot
ABU	DRM and Development Studies	PgDip	-	-	-	24	9	33	4	4	8	8	3	11	36	16	52
	DRM and Development Studies	MA	-	-	-	115	-	115	67	31	98	53	11	64	235	42	277
	DRM and Development Studies	MSc	-	-	-	36	10	46	-	-	-	-	-	-	36	10	46
	DRM and Development Studies	Mphil	-	-	-	67	12	79	-	-	-	-	1	1	67	13	80
	DRM and Development Studies	PhD	-	-	-	5	1	6	-	-	-	-	-	-	5	1	6
<b>Subtotal</b>			<b>-</b>	<b>-</b>	<b>-</b>	<b>247</b>	<b>32</b>	<b>279</b>	<b>71</b>	<b>35</b>	<b>106</b>	<b>61</b>	<b>15</b>	<b>76</b>	<b>379</b>	<b>82</b>	<b>461</b>
ARU	DRM	Masters	1	-	1	5	3	8	3	2	5	-	-	-	9	5	14
	DRM	MSc	1	3	4	3	6	9	1	-	1	-	-	-	5	9	14
	DRM	PhD	-	-	-	3	-	3	-	-	-	-	-	-	3	-	3
<b>Subtotal</b>			<b>2</b>	<b>3</b>	<b>5</b>	<b>11</b>	<b>9</b>	<b>20</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>17</b>	<b>14</b>	<b>31</b>
BDU	DRM & Sustainable Development	U'grade	27	21	48	6	6	12	29	49	78	9	10	19	71	86	157
	DRM & Sustainable Development	MSc	14	5	19	9	1	10	-	-	-	5	4	9	28	10	38
	DRM & Sustainable Development (distance)	MSc	-	-	-	15	-	15	-	-	-	13	4	17	28	4	32
	Climate Change & Development	MSc	11	2	13	8		8	4	1	5	3	2	5	26	5	31
<b>Subtotal</b>			<b>52</b>	<b>28</b>	<b>80</b>	<b>38</b>	<b>7</b>	<b>45</b>	<b>33</b>	<b>50</b>	<b>83</b>	<b>30</b>	<b>20</b>	<b>50</b>	<b>153</b>	<b>105</b>	<b>258</b>
GBU	Prevention & Risk Management of Food Insecurity	MSc			-	54	24	78	2	2	4	2	-	2	58	26	84
<b>Subtotal</b>			<b>-</b>	<b>-</b>	<b>-</b>	<b>54</b>	<b>24</b>	<b>78</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>2</b>	<b>-</b>	<b>2</b>	<b>58</b>	<b>26</b>	<b>84</b>
MAKERERE	Masters of Public Health DM I	Masters	5	2	7	2	5	7	1	4	5	4	1	5	12	12	24
<b>Subtotal</b>			<b>5</b>	<b>2</b>	<b>7</b>	<b>2</b>	<b>5</b>	<b>7</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>12</b>	<b>12</b>	<b>24</b>
SU	DRS and Development	Mphil	1	2	3	2	4	6	4	2	6	1	1	2	8	9	17
<b>Subtotal</b>			<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>4</b>	<b>2</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>8</b>	<b>9</b>	<b>17</b>
Tana`	DMGRC	Mphil	22	13	35	-	-	-	6	5	11	5	2	7	33	20	53
<b>Subtotal</b>			<b>22</b>	<b>13</b>	<b>35</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>5</b>	<b>11</b>	<b>5</b>	<b>2</b>	<b>7</b>	<b>33</b>	<b>20</b>	<b>53</b>
UBuea	MSc DRM	MSc	8	9	17	-	-	-	-	-	-	-	-	-	8	9	17
<b>Subtotal</b>			<b>8</b>	<b>9</b>	<b>17</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>8</b>	<b>9</b>	<b>17</b>
UDM	Environmental Engineering and DM	BSc	-	-	-	53	111	164	-	-	-	-	3	3	53	114	167
<b>Subtotal</b>			<b>-</b>	<b>-</b>	<b>-</b>	<b>53</b>	<b>111</b>	<b>164</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>53</b>	<b>114</b>	<b>167</b>
USTHB	Structural Dynamics and Earthquake engineering	MSc	11	12	23	72	43	115	-	-	-	-	-	-	83	55	138
	Earthquake and flood risk reduction	PhD	-	-	-	3	3	6	-	-	-	-	-	-	3	3	6
<b>Subtotal</b>			<b>11</b>	<b>12</b>	<b>23</b>	<b>75</b>	<b>46</b>	<b>121</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>86</b>	<b>58</b>	<b>144</b>
<b>Total</b>			<b>101</b>	<b>69</b>	<b>170</b>	<b>482</b>	<b>238</b>	<b>720</b>	<b>121</b>	<b>100</b>	<b>221</b>	<b>103</b>	<b>42</b>	<b>145</b>	<b>807</b>	<b>449</b>	<b>1 256</b>

Table 7: Students registered in under- and post-graduate disaster risk-related modules between 26 May 2018 - 25 May 2019

Univ.	Module name	Level	2018/2019		
			M	F	Total
Moi	Principles of Disaster Management and conflict Resolution (course in module)	Masters	12	8	20
	Risk Analysis (course in module)	U'grad	4	12	16
	Disease Surveillance (course in module)	Masters	9	7	16
<b>Subtotal</b>			<b>25</b>	<b>27</b>	<b>52</b>
Makerere	Management of Public Health Disasters	U'grad	19	16	35
	Legal and human rights in disaster situations	Masters	5	2	7
	Post Disaster Recovery and Rehabilitation				
	Public Health and disasters				
	Health systems in emergencies				
	Environmental Health in Disaster Situations		6	4	10
	Mental Health and Psychosocial Issues in Disaster Situations				
	Monitoring and Evaluation		3	4	7
	Disaster preparedness and risk reduction				
	Disease Control in Disaster Situations		3	2	5
	Research methods				
	Logistics Management in Emergencies				
	Food & Nutrition in Disaster Situations				
Reproductive Health in Disaster Situations					
<b>Subtotal</b>			<b>36</b>	<b>28</b>	<b>64</b>
SU	Disaster Risk Science and Development	Masters	-	2	2
	Disaster Risk Analytics	Masters	1	3	4
	Disaster Risk Studies & development	Honours	5	9	14
	Environmental Processes and Hazards (course in module)	U'grad	1	4	5
<b>Subtotal</b>			<b>7</b>	<b>18</b>	<b>25</b>
Tana	Economic Valuation Techniques (in Development Economics)	U'grad	240	190	430
	Introduction to disaster economics	Honours	48	36	84
	Introduction to DRM/DRR (in IOGA Master's Programme: Géomatique)	Masters	6	3	9
<b>Subtotal</b>			<b>294</b>	<b>229</b>	<b>523</b>
UBuea	Natural Hazards, Disasters and Impacts of Climate Change	U'grad	38	36	74
	Groundwater, Pollution and Protection	Masters	16	15	31
	Global commons, natural disasters and environmental risk management				
	Current topics in Climate Change	PhD	6	6	12
	Current trends in Environmental hazards				
	MSc thesis in Natural Resources and Environmental Management	MSc	2	2	4
	PhD Research Project/Thesis	PhD		3	3
	Advanced Topics in Surface and Groundwater Management	PhD	12	11	23
	DRM 601, 603, 605, 609, 611	MSc	8	9	17
DRM 602, 604, 608, 612, 614	MSc	6	6	12	
<b>Subtotal</b>			<b>88</b>	<b>88</b>	<b>176</b>
UG	Applied Integrated Disaster Risk Reduction in Urban Ghana	Masters	6	3	9
	Theories and Analytical Methods for IEH and Integrated DRR	U'grad	32	21	53
	Concepts and Methods in Advanced Integrated DRR	U'grad	2	3	5
	Policies and Strategies for Integrated DRR	U'grad	40	31	71
<b>Subtotal</b>			<b>80</b>	<b>58</b>	<b>138</b>
<b>Total</b>			<b>530</b>	<b>448</b>	<b>978</b>

*Table 8: Comparative numbers of male and female students registered in Periperi U academic courses between 26 May 2018 - 25 May 2019*

Students registered in Periperi U courses	No. Males	No. Females	Total	% of Females
Students registered in all programmes & modules	1 319	880	2 199	40,0
Students registered in u'grad progs (BDU, UDM)	124	200	324	61,7
Students registered in post-grad programmes	683	249	932	26,7
U'grad students who graduated	29	49	78	62,8
Post-graduate students who graduated	92	51	143	35,7
Total students dropped-out/failed	103	42	145	29,0
U'grad students dropped-out/failed.	9	13	22	59,1
Post-grad students dropped-out/failed	94	29	123	23,6

### 3.5.3 Curricula innovation and development

During this reporting period, seven Periperi U partners revised existing disaster risk curricula or developed new integrated academic programmes. **ARU** hosted a stakeholders' workshop to critically assess and adapt the curricula of its existing Master's programmes to incorporate new and relevant disaster risk themes and content. Both courses have been reviewed by the university's senate and currently awaiting accreditation by the Tanzania Commission for Universities (TCU). It is aimed that these programmes will be relaunched in October 2019 for the start of the new academic year.

The development of **BDU's** new PhD programme was finalised and sent for evaluation and review. Meanwhile, their new MSc programme on 'Livelihood Development and Food Security' was approved in January 2019. Before its launch for the 2019/2020 academic year commencing in September 2019, **BDU** academic staff are to incorporate comments and revisions suggested by the evaluation committee. In March 2019, **BDU** began developing a short-term training programme in 'occupational safety and emergency management'. **BDU** staff conducted discussions with various stakeholders and experts among regional, national and international organizations based in Ethiopia to determine the curriculum content and objectives of this proposed programme. **BDU** is continuing to work towards establishing a satellite campus in Addis Ababa undergraduate and postgraduate programmes. However, progress on this also paused due to institutional challenges at the university

**Moi** has been awaiting curriculum approval from the university council for implementation of its master's programme in 'Food Hygiene and Safety'. **Moi** has also participated in meetings reviewing the curriculum of a new Master's programme in 'Global Health and Infectious Disease'. Similarly, **SU** teaching staff worked with the Department of Geography and Environmental Sciences to develop the curriculum for an undergraduate course titled, 'Environmental Processes and Hazards', which was launched in February 2019. During this module, **SU** staff experimented with 'remote learning sessions', having Periperi partners either conduct classes via live broadcast (through platforms such as Skype) or provide pre-recorded lectures, for students to learn from leading DR experts in Africa. The remote learning trials were considered highly effective and innovative and are being considered for incorporation within the **SU** postgraduate programmes that will take place later in 2019.

During this reporting period, **UBuea** developed its new MSc degree in Disaster Risk Management and Safety. There was some uncertainty as to whether the programme could be launched due to the civil

unrest and violence experienced in the region. Despite these challenges, **UBuea** was able to launch this MSc programme in January 2019, enrolling 17 students.

On 19 March **UG** received approval from the Academic Board of the College of Humanities for the launch of its proposed academic programme on Disaster Risk Reduction Science (DRRS). This approval was accompanied by a report, outlining final recommendations and additional content to be included in the course. One of these recommendations was to develop and include a module themed on the ‘Political Economy of Disaster Risk Reduction’.

In September 2018, the Ministry of Science and Technology, Higher Education and Technical Professional (MCTESTP) Training’s National Quality Assessment Council evaluated and approved **UDM’s** BSc Course on ‘Environmental Engineering and DRM’. However, the assessment council noted that some outstanding criteria, particularly areas concerning the “internationalization” of the programme and “percentage of resident teachers with PhD Degrees”. **UDM** staff have been attempting to address these missing criteria to ensure the programme will be renewed for the 2020 academic year.

#### 3.5.4 Internships and student funding

Two partners secured internship opportunities for several of their postgraduate students to provide both work experience and assist with providing financial support. Five **GBU** Masters students conducted internships with WFP country office in Senegal, each of them assisting in one of three WFP initiated research projects to enhance resilience and food security; i) restoration of agricultural land by degraded salinization, ii) climate-smart farming practices among smallholder farmers, and iii) assessing the 4 R initiative interventions.

Seven students of **Makerere’s** Master of Public Health Disaster Management posted for internships with the Uganda Red Cross Society. The students were based in Imvepi refugee settlement for seven weeks. The students were involved in several activities including primary health education, conducting health assessments, participating in coordination and sector meetings and involvement in monitoring water treatment and distribution.

Both **UDM** and **Tanà** signed MoUs with Maragra Açucar SA and MEDAIR respectively, to provide internship opportunities to students in their programmes, which are expected to be initiated in late 2019

#### 3.5.5 Short courses

Between 2018 – 2019, 13 short courses were conducted reaching 361 people (an estimated 42.6% were women) across the continent as can be seen in table 9. The majority of courses were ‘custom-made’, or designed and implemented specifically for an institution, organisation or government partner, and varied thematically according to their target audience.

The short courses offered were highly varied, reaching out to local authorities, humanitarian and NGOs, as well as academic staff and students. A major emphasis of the short courses across the partnership focussed on reaching out to train local municipal officials and authorities in DRR concepts, highlight major risks and hazards in their local regions and enhance their capacity to identify, assess, prepare for and manage such risks. For example, **Tanà** held a short course for 65 municipal officials

Table 9: Periperi U short courses convened between 26 May 2018 - 25 May 2019

University	Title	Theme	Type	Dates		Participants		
						M	F	tot
<b>Moi</b>	Community Based Disaster Risk Reduction	Community Disaster Risk Reduction	Regular	04/06/2018	15/06/2018	17	20	37
<b>USTHB</b>	Progress of the Sendai Framework for DRR 2015-2030	Sendai Framework for DRR 2015-2030	Customised	12/04/2018	14/04/2018	10	5	15
<b>GBU</b>	Training and capacity building for three women's groups in the Senegal River Valley in aquaculture.	Food and Nutrition Security	Customised	06/08/2018	08/08/2018	18	18	36
<b>Makerere</b>	all-hazard Rapid Response Teams (RRT) training	RRT, emergency response and disaster risk management	Customised	16/07/2018	20/07/2018	-	-	41
<b>Tanà</b>	Risk and Disaster Governance, Resilience and Sustainable Development	Governance, resilience and sustainable development	Customised	17/07/2018	18/07/2018	45	20	65
<b>ARU</b>	Understanding of Risk and role of local community along Kizinga River in Temeke municipality in managing flood risks - Chamazi centre	Flood risk management	Customised	06/11/2018	06/11/2018	14	8	22
<b>ARU</b>	Understanding of and role of local community along Kizinga River in Temeke municipality in managing flood risks - Mtoni centre		Customised			20	9	29
<b>ARU</b>	Understanding of and role of local community along Kizinga River in Temeke municipality in managing flood risks - Mbagala centre		Customised			12	8	20
<b>Makerere</b>	Public Health in Complex Emergency	Public health in emergency	Regular	05/11/2018	10/11/2018	9	18	18
<b>SU</b>	CRA short Course	Urban risk / community-based risk assessment	Regular	12/11/2018	16/11/2018	5	4	9
<b>UDM</b>	Statistics and GIS for risk practitioners	Statistics, GIS	Customised	01/08/2018	15/11/2019	2	4	6
<b>ARU</b>	Understanding of disaster and the role of Tanga Council in disaster risk management	Disaster Risk Management	Customised	13/03/2019	13/03/2019	22	28	50
<b>UG</b>	Graduate write shop	Navigating the graduate space	Customised	21/01/2019	25/01/2019	1	12	13
<b>totals</b>						<b>175</b>	<b>154</b>	<b>361</b>

(45 men and 20 women) from three administrative regions of Madagascar, Atsimo Andrefana, Atsimo Atsinanana and Bongolava. The objective of the short course was to introduce these regional managers to the field of disaster risk and address local risk issues particularly those related to cyclonic activity.

**ARU** hosted 4 short courses during this reporting period focussed on engaging communities, local government and other stakeholders on 'Understanding of disaster risk and role of local community and government in disaster risk management'. Three of these courses took place simultaneously

across three communities situated along Kizinga River valley in Temeke municipality, Dar es Salaam on 6 November 2018. These Temeke Municipality based sessions were designed to disseminate information on local flood risk and vulnerability collected by **ARU** and provide a platform to discuss strategies to mitigate such risks and vulnerabilities for communities along the Kizinga River. The 71 (35% female) participants who attended these courses included local leaders from sub-ward and ward levels, representatives of religious groups, Tanzanian Red Cross volunteers at community level and local key informants.

**Makerere** in collaboration with the WHO implemented an all-hazard RRT training short course in Munyoyo, Uganda. The objective of the RRT training was to strengthen the ability and skills of multidisciplinary teams and individuals to rapidly detect and respond effectively to public health emergencies and potentially harmful events. 41 participants attended the RRT training from three countries (11 from Nigeria, 10 from South Sudan, 20 from Uganda), including Ugandan medical and emergency health professionals and staff from the WHO and Centres for Disease Prevention and Control (CDC) Country Offices. 19 facilitators were involved in the delivery of this training, including nine staff from **Makerere**, three facilitators from the United States CDC and nine WHO facilitators from country offices across the continent as well as from WHO offices in Lyon, France.

**ABU** had reported challenges in short course delivery - that despite their efforts to advertise short courses to government departments, local authorities and private agencies - the response had been very poor. In response, **ABU** staff is focusing on “repackaging “and redesigning their short courses to make these more accessible.

### 3.5.6 Risk research

Strengthening understanding of disaster risk represents a central priority for Periperi U. This was reflected through a diversity multi-scalar faculty research initiative conducted or planned as well as published, peer-reviewed articles during this reporting period.

#### *Post-graduate student research*

In 2018-19, 393 students across Periperi U undertook research for BSc, PGDip, Honours, Masters and PhD degrees, including 208 Masters projects and 25 PhD topics. Despite limited resources, 156 theses were completed during the year. These included 106 at Masters level, with 99 of these attributed to students at **ABU** as can be seen in Table 10. Taking into account that several students would have begun their thesis research before this reporting period, when theses from across 2016-18 are included, an impressive 828 student theses have been undertaken across the partnership in just three years with 421 completed at the time of reporting.

Table 10: Total Periperi U postgraduate research projects between 2016 -2019

Institutions	Y1: 2016/17			Y1: 2017/18			Y3: 2018/2019			Total		Total
	Completed	Ongoing	Total	Completed	Ongoing	Total	Completed	Ongoing	Total	Completed	Ongoing	
ABU	13	0	13	44	46	90	99	110	209	156	156	312
ARU	44	13	57	26	10	36	6	20	26	76	43	119
BDU	31	17	48	6	26	32	1	34	35	38	77	115
GBU	20	0	20	0	1	1	4	18	22	24	19	43
Ghana	6	0	6	0	6	6	0	15	15	6	21	27
Makerere	14	0	14	2	5	7	0	7	7	16	12	28
Moi	2	0	2	0	0	0	0	1	1	2	1	3
SU	7	1	8	2	13	15	10	10	20	19	24	43
Tana`	16	0	16	1	22	23	0	7	7	17	29	46
UBuea	4	0	4	1	0	1	3	6	9	8	6	14
UDM	21	4	25	5	0	5	32	4	36	58	8	66
USTHB	0	5	5	0	1	1	1	5	6	1	11	12
<b>Total</b>	<b>178</b>	<b>40</b>	<b>218</b>	<b>87</b>	<b>130</b>	<b>217</b>	<b>156</b>	<b>237</b>	<b>393</b>	<b>421</b>	<b>407</b>	<b>828</b>

While research themes varied widely, as figure 2 displays, the most common topics focused on investigating health risk related issues, climate change, drought, food security, topics concerned with disaster preparedness, mitigation and or response, as well as research assessing risk and vulnerability of communities. PhD research topics favoured urban risks including earthquake engineering and flood risk reduction. Another research sub-topic which is beginning to see increased attention among students concerns early warning information and forecasting to better predict hazards and preemptively prepare for potentials disasters. An illustrative list of student theses undertaken in the past year is shown in table 11.

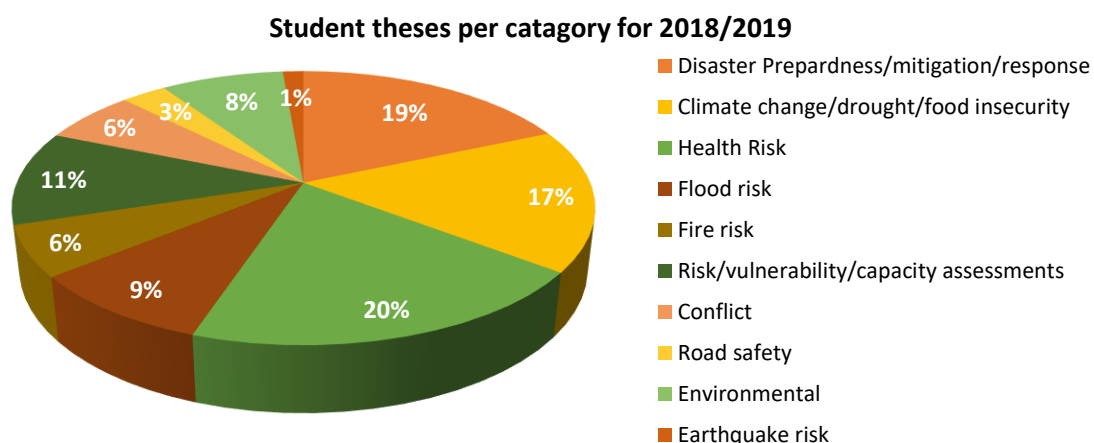


Figure 2: Student theses per category for 2018/2019

*Table 11: Illustrative examples of research undertaken by postgraduate students between 26 May 2018 - 25 May 2019*

Institution	Output Type	Thesis Author	Title
<b>ABU</b>	PhD	Slaku Lugard Bijimi	Assessment of the Economic Impact of Flood in Mokwa L.G.A. of Niger State, Nigeria.
<b>ARU</b>	PhD	Abdullahi Hussaini	An Analysis of the role of Weather Forecast and Early Warning Information in Mitigating Weather-Related Disasters in Nigeria.
<b>BDU</b>	Masters	Muhyadin Ali Ahmed	Role of communications technologies in early warning systems on preventing flood hazard in Jigjiga city, Somali Regional State, Ethiopia
<b>GBU</b>	Masters	Bacary Sagna	Which Agriculture for a Sustainable Food Security in a Context of Climate Change in Senegal?
<b>Makerere</b>	Masters	Aneta Imoya Francis	Utilisation of antenatal care services and facility delivery among women in Bidibidi refugee settlement
<b>Moi</b>	Masters	Jennifer Akumu	Factors Associated with Uptake of Floods Early Warning Information in Butaleja District, Eastern Uganda
<b>SU</b>	Honours	Lauren Moir	Flooding preparedness of hospitals in the Cape Town Municipality
<b>Tanà</b>	PhD	Mirana Miarimanana Razafimanantsoa	Urban Resilience to Floods: Institutional and Organizational Framework of the City of Antananarivo
<b>UBuea</b>	MSc	Jitiz Louis	An assessment of the vulnerability of the West Coast to Coastal Erosion
<b>UDM</b>	Honours	Albertina Denise de Morais Fortunato	Assessment of groundwater vulnerability and contamination in the Greater Maputo metropolitan area applying the Drastic Model.
<b>UG</b>	Masters	Pinto Emmanuel Nartey	Vulnerability to flood risks in urban Ghana: A case study of Kaneshie, Tesano and Nima in the Accra Metropolitan Area.
<b>USTHB</b>	PhD	Nassima Benkaci	Non-Stability and Non-Reproducibility of Ambient Vibration HVSR Peaks in Algiers

### ***Faculty-led disaster risk research***

During 2018-19, Periperi U faculty-led research collaborations continued with government, NGOs, international research groupings and international agencies, as well as among other Periperi U partners. This signalled growing confidence in the capacity of Africa-based researchers and scientists in the disaster risk domain – both within and outside the continent. Box 1 below provides a snapshot of this increasing capability.

*Box 1: Examples of Periperi U disaster research collaborations between 26 May 2018 - 25 May 2019*

<b>Examples of research collaboration</b>
<b>ARU</b> conducted research on Integrating settlement improvement and community coping strategies for flood risks in informal settlements in Kigogo, Kinondoni municipality.
<b>ARU, BDU, Makerere, SU, Tanà</b> and <b>UDM</b> gathered data for a ‘tracer’ study of the career paths of approximately 400 (primarily) Masters graduates from newly introduced disaster risk-related academic programmes. The research sought to record and analyse employment, gender, age and the types of organisations graduates are employed by, as well as their main focus of work and the spatial distribution.



<p><b>GBU</b>, with support from the Senegalese WFP office and their student interns, continued several research projects across the country. These include; i) studying restoration of degraded agricultural land by salinization in the Fatick region, ii) researching smallholder farmers applying climate-smart agricultural practices to enhance their resilience in the Tambacounda and Kolda regions, as well as iii) Assessment of Food security and Resilience in the Kolda region.</p>
<p><b>Makerere, SU</b> and <b>UDM</b>, in collaboration with the University of Reading, have been conducting the ‘Forecasts for Anticipatory Humanitarian Action’ (FATHUM) 2017-2020 Research Project’ which focuses on the prospect on implementing forecast-based financing (FbF) within their respective countries to reduce risk.</p>
<p><b>Tanà</b> conducted research in collaboration with the ministry on microfinance, social protection and resilience within the Toamasina and Brickaville districts in Madagascar, interviewing over 20 local authorities, and over 670 households over the course of the reporting period.</p>
<p><b>USTHB’s</b> continued collaboration with the National Delegation for Major Risks of Algeria aims at establishing a nationwide loss and damage database for Algeria.</p>
<p><b>Makerere</b> collaborating with WFP Country offices in Uganda to analyse and assess the feedback and data gathered from the implementation of the first 3PA programme activities</p>
<p><b>UBuea</b> working in partnership with the Institute de Recherches pour le Developpement (IRD) in France, Le Centre de Recherche et de Formation en Eco-éthologie<sup>13</sup> (CERFE) and the International Federation of Red Cross and Red Crescent Societies (IFRC).</p>

### Publications

Consortium partners **produced 41 disaster risk-related publications**, including nine research reports and 13 peer-reviewed journal articles (see figure 3 below). **Tanà** itself produced over a quarter of the publications. Figure 4 illustrates the varied research focus of partner publications across multiple themes, with most publications focussing on urban risk, resilience and or vulnerability assessments. Table 12 provides a short, illustrative list of publications produced in the past year.

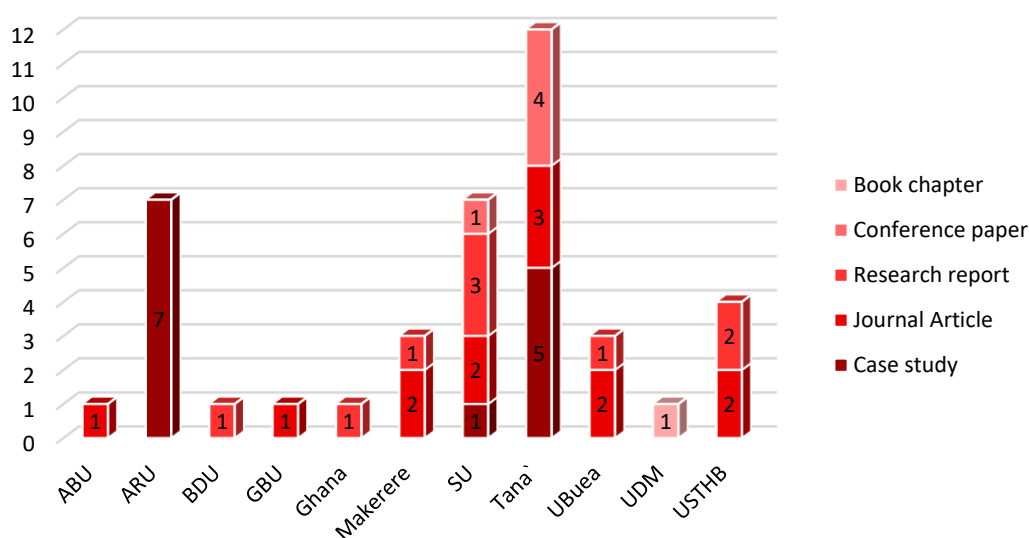


Figure 3: Types of publications produced by Periperi U partners between 26 May 2018 - 25 May 2019

<sup>13</sup> The Centre for Research and Training in Eco-ethology

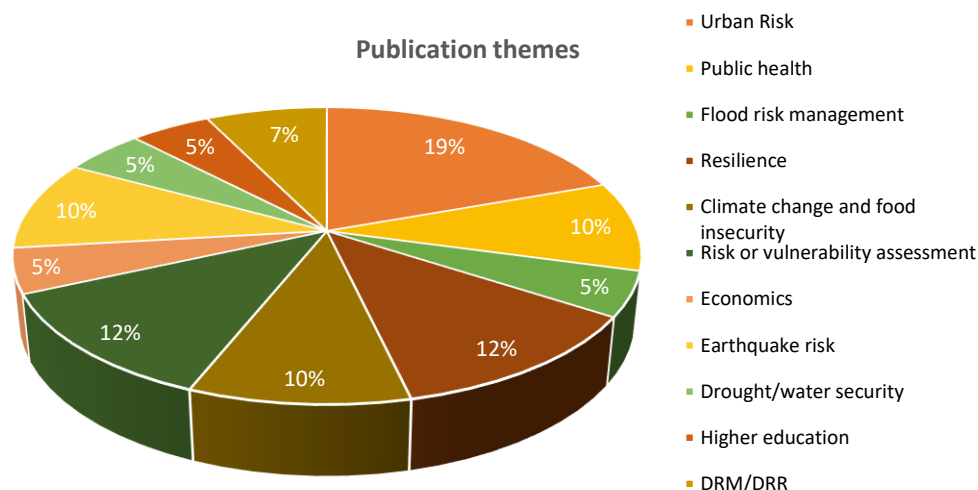


Figure 4: Research themes of Periperi U publications and outputs between 26 May 2018 - 25 May 2019

Table 12: Illustrative list of publications between 26 May 2018 - 25 May 2019

University	Output type	Research author/s	Research title
<b>Ardhi</b>	Case study	Kiunsi, R., Kassenga, G.; Malele B.; Uhinga, G.; Mgendu, M., Chacha A; Msumba, J; Chipatta, L.; Kayemamu, R.; and Pascal, S.	Implementation of a participatory risk and vulnerability assessment for communities around Kizinga River catchment area in Temeke Municipality.
<b>Makerere</b>	Research report	Godfrey Bwire, Amanda K. Debes, Christopher G. Orach, Atek Kagirita, Malathi Ram, Henry Komakech, Joseph B. Voeglein, Ambrose W. Buyinza, Tonny Obala, W. Abdullah Brooks and David A. Sack	Environmental Surveillance of <i>Vibrio cholerae</i> O1/O139 in the Five African Great Lakes and Other Major Surface Water Sources in Uganda
<b>SU</b>	Journal article	Holloway, A. & Fortune, G	Beyond fragility: Advancing skilled human capital for disaster risk reduction and resilience in Africa
<b>Tana</b>	Contribution Paper	Lazamanana Pierre	Vulnerabilities and strategies for adaptation to drought: a study applied to coastal communities in the Androy region of Madagascar
<b>UBuea</b>	Journal article	Mabel N.Wantim, Costanza Bonadonna, Chris E. Gregg, Scira Menoni, Corine Frischknecht, Matthieu Kervyn, Samuel Ayonghe	Forensic assessment of the 1999 Mount Cameroon eruption, West Central Africa
<b>UDM</b>	Book chapter	Nogueira, Luiz A. Horta, Leal, Manoel Regis LV, Cortez, Luis AB	Sugarcane Bioenergy for Sustainable Development (ISBN 978-1-138-31294-4)

### 3.5.7 Community outreach – Social impact

Community outreach that advances social impact represents a key component of Periperi U risk reduction efforts. It extends the partners' reach to highly vulnerable communities through the core areas of research, teaching/learning and strategic partnership. These efforts fall specifically within the remit of social impact, where university action mobilises engaged citizenship and engaged research, as well as engaged in teaching and learning. During 2018 - 2019, Periperi U partners increasingly involved were actively involved in a wide range of community outreach activities, most of which were oriented towards conducting risk assessments and raising risk awareness among communities.

Such activities were conducted by **ARU** which reached out to educate and raise awareness among communities along Kizinga River valley in Temeke municipality through a series of community workshops on flood hazard and its impacts and measures that the communities and residents can implement to minimize these risks.

**BDU** initiated a risk assessment of several communities in Bahir Dar city in August 2018 to identify and provide suggestions for addressing various risks. The assessment sought to identify and map various hazards and risks using primarily GIS and remote sensing tools. The final assessment report was presented to local stakeholders such as community leaders, service providers and local government institutions and departments to highlight various risks as well as potential recommendations to address them. Similarly, as a product of its short course hosted in November 2018, **SU** provided a CRA report to the community members of Mandela City, as well as local authorities, emergency services and other stakeholders. The report provides a summary of the discussions and engagements between short course participants and the community, sharing the findings and suggestions concerning local hazards, vulnerabilities and risks identified during the CRA training, in which the community and local authorities can utilise as a tool to inform future planning and development to reduce risk.

After running short courses on the "Risk of water-borne diseases for livestock in the Senegal River Valley" in July 2017, **GBU** assisted in establishing a management committee of local stakeholders in the livestock sector (45 males and 15 females) to provide a platform for communication, consultation and learning among themselves. **GBU** continued its involvement as a consultant for this committee throughout the reporting period, attending meetings, offering assistance and advice on risks to the livestock sector.

Periperi U students also contributed significantly towards community outreach initiatives during this period. During their internship with the Uganda Red Cross Society, **Makerere** Students conducted outreach work within refugee settlements in the Arua district. Such outreach included teaching basic health education to refugees, supporting water and sanitation teams and participating in community and administrative meetings.

As part of the community interaction and outreach segment of their education, second-year students in **Moi's** College of Health Sciences visited various communities in Western Kenya to conduct 'community diagnoses' and risk assessments. This provided an opportunity to investigate disaster risk-related issues, identify hazards and vulnerabilities, and understand locally applied risk reduction measures. The students were tasked to use this information to assist communities to identify solutions to address their risks and enhance their resilience.

Similarly, in 2018 and 2019, **SU** students enrolled in their Honours module conducted evaluative studies on the implementation of Stellenbosch University's Drought Response plan in the student residences (2018 class), wildfire risk reduction initiatives around the community of Glencairn, Cape Town (2019 Class). The 2018 Honours class presented their findings to the university's Facilities Management division and assisted them to improve its communication strategies to ensure students and staff are better and more frequently informed on water saving measures and the impact of these initiatives.

For the International Day for DRR on 12 October 2018, **SU** staff attended a community disaster awareness and prevention function and aided Disaster Management staff with household survey assessing prevailing risks in the town of Lanquedoc. On 29 October 2018, staff and students conducted a belated 'Mandela Day' outreach (because actual Mandela Day date falls over university vacation period) delivering and distributing collected supplies and materials for dozens of victims of informal settlement fires in the Stellenbosch Municipality.

**UDM** continued to assist local communities in Manjacaze, Mozambique to develop and maintain irrigation systems to enable sustainable agriculture, as well as monitor the performance and sustainability of these systems. In August 2018, **UDM** also assisted in designing and implementing a new irrigation system for sugarcane farmers in the Manhiça-Maragra region, which they estimated would improve livelihood and food security for some 8 000 people in the region

### 3.6 Strategic engagement to advance robust DRM policy and practice

#### 3.6.1 Overview

During this reporting period, members of the Periperi U consortium engaged across multiple scales and with a variety of stakeholders. Opportunities for these engagements were created at various events including meetings, conferences and technical workshops. These events have been differentiated between Strategic, Technical and Collaborative engagements. Box 2 shows how the Periperi U differentiated *strategic* from *technical* engagement to strengthen coherence and consistency across the partnership.

#### 3.6.2 Strategic engagements in 2018/19 – multiple scales, multiple stakeholders

Strategic engagement is an integral Periperi U programme component to improve DRM policy and practice through interactions with governmental officials, national and international NGOs, international agencies and other international initiatives. Table 13 below illustrates the consortium's complex, multi-scalar reach through a diversity of partner interactions and deliberate "local to global" engagements. Over the 2018-2019 reporting period, partners were involved in 45 meetings, conferences and consultations that took place across subnational/local, national, regional, continental and global scales and involved over 6 500 people. As seen in Figure 5, most of these engagements took place at a continental scale, with many partners present at the same events such as the AfARP DRR and annual consultative meeting in Tunisia.

Box 2: Clarification definitions for Periperi U partners on ‘strategic’ and ‘technical’ engagement

A. Strategic engagement	B. Technical engagement
<p><i>Strategic engagement</i> represents an explicit focus area for Periperi U partners. In our agreement with USAID, our strategic engagement activities aim for clearer recognition (across all scales) of the contribution that African higher education institutions play in strengthening national capacities to better understand and reduce risk.</p> <p>For reporting purposes, <i>strategic engagement</i> is defined as:</p> <p>purposeful engagement by each participating university <i>in (sub) national, regional, continental or international disaster risk reduction policy-making and strategic decision-making fora or similar processes</i> (e.g. in national DRR platforms or local disaster risk management committees) to advance recognition of the contribution of higher education, science, technology or innovation to the field.</p> <p style="text-align: center;"><b>or</b></p> <p>purposeful engagement by each participating university in <i>relevant higher education and science policy-making and strategic decision-making fora at university, (sub) national, regional, continental or international</i> levels to advance disaster risk-related scholarship (e.g. National Academies of Science/Research Foundations).</p> <p>In addition, at least <i>one of the following two criteria</i> must apply:</p> <ol style="list-style-type: none"> <li>1. An explicit <i>strategic planning process must precede the event</i>, with decision on the type of intervention to be taken (e.g. presentation, concept note, policy document, facilitated panel, site visit), and evidence of implementation.</li> </ol> <p style="text-align: center;"><b>and/or</b></p> <ol style="list-style-type: none"> <li>2. The terms of reference of the event/process <i>are already strategic</i> (e.g. a national consultation on flood early warning systems, or membership of an institutional planning committee for curriculum approval).</li> </ol> <p>This means that attending a national conference as a participant, with no specific strategic role or intervention made, would not automatically be considered a ‘strategic engagement’.</p>	<p><i>Technical engagement</i> differs from strategic engagement, as instead of focusing on policy and strategic decision-making, it profiles partners’ technical, academic and scientific contributions to the disaster risk domain.</p> <p>For reporting purposes, technical engagement is defined as:</p> <p>purposeful engagement by each participating university <i>in (sub) national, regional, continental or international disaster risk reduction academic, scientific, technical and research fora or similar processes</i> (e.g. technical advisory committees on urban planning or impact-based forecasting), to strengthen the technical robustness of disaster risk-related interventions and strategies.</p> <p>In addition, at least <i>one of the following two criteria</i> must apply:</p> <ol style="list-style-type: none"> <li>1. An explicit scientific, technical, academic or research <i>communication planning process must precede the event</i>, with decision on the type of intervention to be taken (e.g. presentation, concept note, policy document, research briefing, site visit), and evidence of implementation.</li> </ol> <p style="text-align: center;"><b>and/or</b></p> <ol style="list-style-type: none"> <li>2. The terms of reference of the event/process <i>are already explicitly technical or scientific</i> (e.g. an expert group on epidemic preparedness during floods, or membership of an expert scientific or technical group on fire prevention).</li> </ol> <p>This means that attending a national technical conference on flooding as a participant, with no specific technical advisory role or intervention made, could not be classified as a ‘technical engagement’ (participation – ‘yes’, but engagement, ‘no’).</p>

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Table 13: Range and scale of strategic engagements by Periperi U partners between 26 May 2018 - 25 May 2019

Date	Title	Partners attended	Att.	Venue	Host
<b>International</b>					
27-29/05/2018	New Shape Forum (NSF)	USTHB	250	Stockholm, Sweden	Global Challenges Foundation in Stockholm
28/06/2018	ARU-NIPA (National Information Technology Industry Promotion Agency) South Korea Cooperation	ARU	3	Dar es Salaam	ARU
30/08/2018	Global STAG Working Group on Capacity Building	SU	23	Geneva, Switzerland	UNISDR
08/10/2018	Prime Minister's Disaster Management Department and Ilemela Municipal Council of Mwanza for a learning trip to South Korea.	ARU	8	Daegu City, (South Korea)	Daegu City Authority
01-04/11/2018	Regional Workshop Strengthening Empowering and Mobilising Youth and Young Professionals in Science, Engineering, Technology and Innovation for DRR in Asia and the Pacific	SU	52	Jakarta, Indonesia	UNESCO, UNISDR, IRDR Indonesia
04-06/02/ 2019	WFP meeting concerning Adapting the 3PA to urban, displaced and refugee settings	Makerere, SU	20	Rome, Italy	WFP
13-17/05/2019	6th Global Platform for Disaster Risk Reduction	All Periperi U partners, except Makerere	4000	Geneva International Conference Centre	UNDRR
<b>Subtotal</b>				<b>4304</b>	
<b>Continental</b>					
14-15/06/2018	Strategic engagement with the Deputy County Commissioner	Moi	10	Port Victoria	Deputy Commissioner's office at Budalangi
09-13/10/2018	Africa-Arab platform on disaster risk reduction	ALL Periperi U partners	800	Tunis (Tunisia)	Tunisia government
14-15/10/2018	Periperi U Annual consultative meeting	ALL Periperi U partners	30	Tunis (Tunisia)	Periperi U secretariat in collaboration with USTHB & ENIT - University of Tunis
18-26/01/ 2019	Secretariat visit to assist GBU partners with restructuring their team and strategic plan	GBU, SU	8	Gaston Berger University, St Louis, Senegal	GBU
17/05/2019	PPU Internal Meeting with OFDA representatives	All Periperi U partners, except MAK	18	Geneva International Conference Centre	Periperi U
18/05/2019	PPU Internal Meeting with UNESCO representative	All Periperi U partners, except MAK	15	Forum Geneve	Periperi U
18.05/2019	Periperi U Annual consultative meeting	All Periperi U partners, except MAK	16	Forum Geneve	Periperi U
13-14/05/2019	UNDRR - STAG meeting	Tanà	N.a	Geneva	UNDRR - ISC
14/05/2019	UNDRR - ISC - IRDR 21st Scientific Committee meeting	Tanà	24	Geneva	UNDRR - ISC - IRDR

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<b>Subtotal</b>					<b>921</b>
<b>Regional</b>					
18-19/07/2018	5th DiMSUR (Disaster Risk Management, Sustainability and Urban Resilience) Executive Board Meeting	Tanà	30	Maputo, Mozambique	DiMSUR/ UNHABITAT
29/08/2018	NEPAD ARCH – Technical meeting with Periperi U Universities	UDM	3	USAID headquarters in Maputo	UDM
04-05/09/2018	AWGDRR Regional Platform for Economic Community of Central African States (ECCAS)	UBuea	52	Yaoundé, Cameroon	ECCAS
06-07/09/2018	Arab Science & Technology Advisory Group (Arab-STAG)	USTHB	8	Beirut (Lebanon)	Conseil National de Recherche Scientifique
12-13/09/2018	Arab Coordination Mechanism DRR	USTHB	40	Tunis (Tunisia)	Government of Tunisia, League of Arab states
20/09/2018	Ardhi strategic meeting with WFP	ARU	5	Ardhi University	Ardhi University
13/10/2018	Side event meeting with Director of Walker Institute, University of Reading (UK)	ARU	1	Tunis (Tunisia)	Tunis (Tunisia)
28/11/2018	Electronic meeting between Ardhi and Walker Institute of the University of Reading to explore the possible areas for collaboration on DRR	ARU	4	Ardhi, (Tanzania) and Reading (UK)	N/A
13-17/11/2018	The Hydro-Meteorological Forum for Central Africa	UBuea	200	Libreville (Gabon)	World Bank's Global Facility for Disaster Reduction and Recovery
19-23/11/2018	The Global Monitoring for Environment and Security (GMES) – Africa Forum	UBuea	250	Libreville (Gabon)	African Union Commission and the Government of Gabon
<b>Subtotal</b>					<b>593</b>
<b>National</b>					
07/06/2018	Signature of the partnership agreement (MoU) with the Ministry of population, social protection and women promotion (MPPSPF)	Tanà	15	MPPSPF Office	MPPSPF
12/06/2018	Joint discussion with the Asian Disaster Preparedness Centre to increase capacity of DRM in Ethiopia	BDU	20	Addis Ababa	National DRM Commission
06/06/2018	To know the forms of vulnerabilities and resilience to think about social protection	Tanà	24	Antananarivo / Madagascar	IRD, Université d'Antananarivo, CERED, Université Bordeaux
09/08/2018	Risk Dynamics and Dimensions in Mozambique	UDM	170	Maputo, Mozambique	UDM
29-30/11/2018	The Cameroon National Risk Profile Workshop	UBuea	44	Yaounde, Cameroon	Protection Civile, UNISDR and the CIMA Foundation.
30/10/2018	Signature of the MoU with WFP Country Office	Tanà	10	Antananarivo (Madagascar)	Tanà

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07/12/2018	Signature of the MoU with the MEDAIR Organisation	Tanà	30	BNGRC (Bureau National de Gestion des Risques et Catastrophes) Office, Antananarivo (Madagascar)	MEDIAIR
06/02/ 2019	Ordinary General Assembly GTPS for the evaluation of the achievements of the Thematic Group on Social Protection in 2018 to plan the strategy for 2019.	Tanà	63	Antananarivo	GTPS (Social Protection thematic group)/MPPSPF
15/02/ 2019	Exchange meeting on the future partnership and possible research collaboration between DMGRC (Multidisciplinary Disaster and Risk Management Master Programme) / CERED and the National Social Security Fund (CNaPS)	Tanà	5	Antananarivo	DMGRC/CERED - CNaPS
18/03/ 2019	Integrating DRR into city planning tools	Tanà	39	Antananarivo	Ministère de l'Aménagement du Territoire, de l'Habitat et des Travaux Publics - UNHABITAT
21/03/2019	Maproom project implementation/validation Workshop	Tanà	67	Antananarivo	Prime Minister's Office - Met Service
08.05/2019	Presentation of the new climate trends of Madagascar till 205 based on the 5th Intercontinental Panel on Climate Change (IPCC) global report on climate change	Tanà	42	Hotel le Pavé Antaninarenina / Antananarivo	Prime Minister's Office - Met Service
10/05/2019	Public policies and institutional capacity study on climate resilience and disaster risk management	Tanà	38	World Bank office Country office, Antananarivo	Prime Minister's Office - National Office of Coordination of Climate Change
21/05/2019	National Commission for the implementation of the recommendations for DRR of the Science-Policy national conference on DRM	USTHB	22	Algiers (Algeria)	National Delegation for Major Risks,
<b>Subtotal</b>					<b>589</b>
<b>Local</b>					
17/09/2018	Cape Town Consular Corps Meeting	SU	30	Stellenbosch University	Stellenbosch University
17/01/ 2019	Meeting with WFP concerning collaboration on 3PA	ARU	4	Ardhi University	ARU
03/03/ 2019	Follow-up meeting with WFP concerning collaboration on 3PA	ARU	5	WFP Offices Dar es Salaam	WFP
16/04/2019	Overview of the PeriPeri U Project	UG	30	Accra	PPU-UG
24/05/2019	CVM response to Cyclones Idai and Kenneth	UDM	37	Hotel VIP, Maputo	CVM (Mozambique Red Cross)
<b>Subtotal</b>					<b>106</b>
<b>Total participants</b>					<b>6513</b>



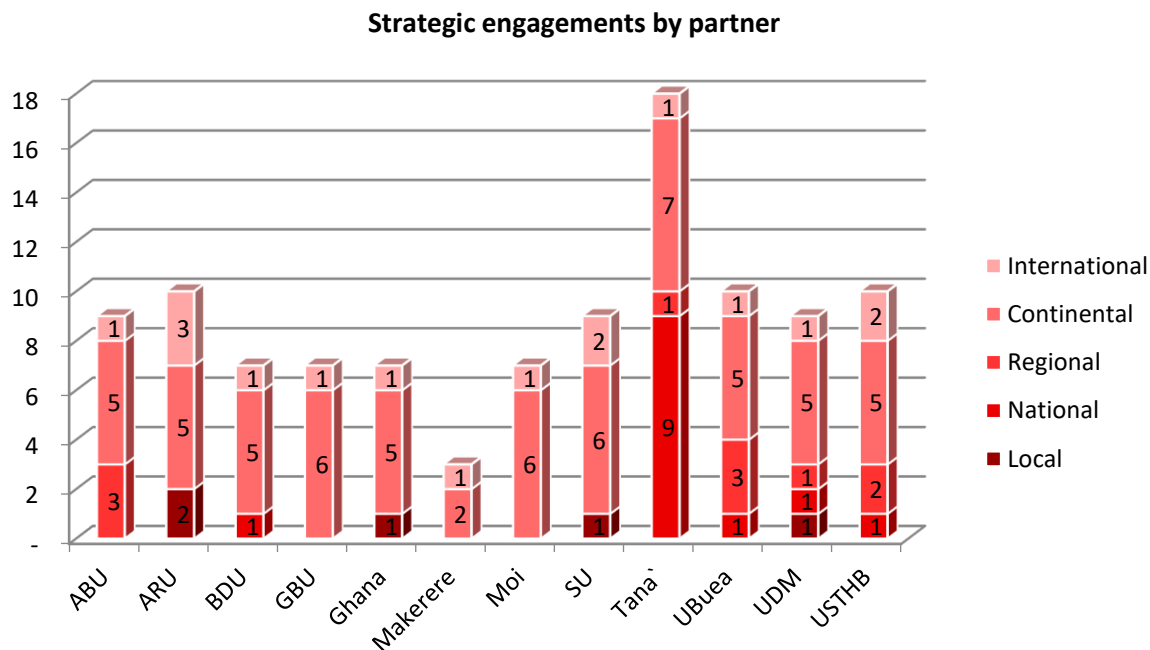


Figure 5: Strategic engagements attended per partners from local to international scales between 26 May 2018- 25 May 2019

In each instance, Periperi U participants were actively involved as hosts, co-organisers, discussants, panellists, presenters, technical advisors, or had other specialist roles, as shown in figure 6. Major strategic events include partner participation at the and the 6<sup>th</sup> GPDRR in Geneva Switzerland, in which the partners were able to engage with a multitude of stakeholders from across the globe as well as act as ambassadors for the consortium and for African academia upon a global stage.

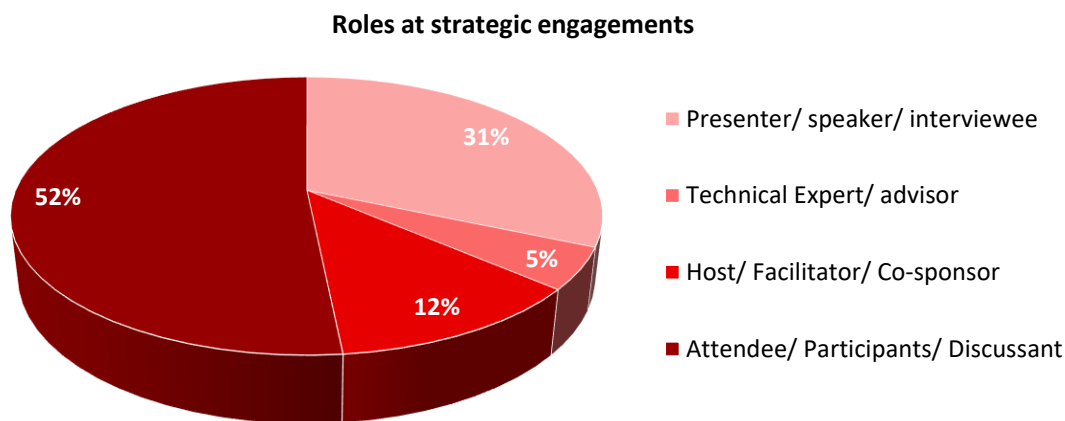


Figure 6: Partners' roles at Strategic engagements between 26 May 2018 – 25 May 2019

### 3.6.3 Technical and collaborative engagements.

Partners continued to participate in approximately 45 technically-oriented engagements and events throughout this reporting period, attended by an estimated 2252 people. Table 14 below, lists the various technical engagements from local to international scales that the partners participated in, while figure 7 illustrates the range of engagements conducted by each partner over the past year.

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Table 14: Range and scale of Technical engagements by Periperi U partners between 26 May 2018 – 25 May 2019

Date	Title	Partners attended	Att.	Venue	Host
<b>International</b>					
16-20/07/2018	All Rapid Response Training (RRT)	MAK	41	Kampala	World Health Organisation/Makerere University School of Public Health
25/06/2018-27/06/2018	GREThA-IDEA "A World United- Allies in Ethical Development" Regional perspectives: development issues in Africa	Tanà	60	Université Bordeaux / France	Université de Bordeaux, GREThA, IDEA, IRD
20/03/2018-31/08/2018	Postdoctoral Research		1	Brussels, Belgium	Vrije Universiteit
27/05/2018-21/07/2018	Post-doc training and Volcano Monitoring Training Course on DRR issues (volcanology) in Hilo (Hawaii) and Vancouver, Washington, USA		14	Hilo, Hawaii and Vancouver, Washington, USA	Centre for the Study of Active Volcanoes, University of Hilo, Hawaii and Cascades Volcano Observatory (United States Geological Survey), Vancouver, Washington
27-29/09/2018	Epidemiological study of e-waste on health	UG	20	Brussels, Belgium	UNICORE (Uniform Interface to Computing Resources)
08/09/11/2018	2 <sup>nd</sup> Meeting of the Global Risk Assessment Framework (GRAF) Expert Group	SU, Tanà, USTHB	42	Geneva, Switzerland	UNISDR
13-15/03/2019	Forensic Investigations of Disasters: Researching Root Causes in Disasters: A Multidisciplinary Approach to Learn Lessons from Disasters		50		Labex DynamiTe, Paris, France & University of Cergy-Pontoise
13/16/02/2019	Frontiers in Heritage Science: Traditionnal Earthquake Risk Reduction Construction Techniques and Building Materials in The Casbah of Algiers (Algeria)		85	Paris, France	French Academy of Sciences
03-04/04/2019	3 <sup>rd</sup> Global Risk Assessment Framework (GRAF) expert meeting in Geneva.	USTHB	30	Room XIV Palais des Nations, United Nations, Geneva (Switzerland)	UNISDR
12/06/2018-14/06/2018	Expert Group of the GRAF		32	Geneva, Switzerland	UNISDR
08-09/05/2019	1st Meeting of Africa Science & Technology Advisory Group (A-STAG)		20	Hilton Hotel, Nairobi (Kenya)	African Union Commission and UNDRR
<b>Subtotal</b>			<b>395</b>		
<b>Continental</b>					
27-31/08/2018	Free and Open Source for Geospatial 2018 (FOSS4G2018) and the Humanitarian Open Street Map Summit (HOTS summit)	Tanà	Not available	Dar Es Salaam, Tanzania	World Bank
19-27/09/2018	Drone Use for flood vulnerability mapping	UG	14	Copenhagen, Denmark	University of Copenhagen
<b>Subtotal</b>			<b>14</b>		
<b>Regional</b>					
12-16/12/2018	Community risk assessment short course	ARU, BDU, GBU, Moi	9	Stellenbosch University, South Africa	RADAR

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10-21/09/2018	African Risk Methods School (ARMS)	All Periperi U partners	63	Ardhi University	Ardhi University
<b>Subtotal</b>			<b>72</b>		
<b>National</b>					
26/07/2018	Feedback workshop from interns from Ardhi University, University of Dodoma, Tanzania Redcross Society and University of Dar es Salaam	ARU	28	Ardhi University	Ardhi University
29/05/2018-02/06/2018	Development of an agricultural risk management training course curriculum	BDU	30	Hawassa, Ethiopia	Platform for Agricultural Risk Management (PARM), International Fund for Agricultural Development (IFAD) and Hawassa University,
01/06/2018-02/06/2018	5th Annual National Conference on the theme "Agriculture and Environmental Management for Sustainable Development"		350	Bahir Dar, Ethiopia	BDU (College of Agriculture and Environmental Sciences, School of Earth Science, and Institute of Disaster Risk Management and Food Security Studies)
24/08/2018	National Consultation Workshop on Integrated Risk Management		21	Addis Ababa, Ethiopia	Ethiopian Red Cross Society
02/05/2019	Role of Higher Education Institutions in implementing the Sendai Framework for Disaster Risk Reduction: the Africa/Ethiopia Experience;		15		Global Network for Disaster Reduction (GNDR)
15/02/2018	The restoration of degraded agricultural land by salinisation: a contribution to the development of resilience to food and nutritional security in Senegal in the region of Fatick	GBU (Internships)	3	Fatick, Senegal	WFP
15/02/2018	Climate-smart agriculture: Which climate-smart farming practices are more suited to enhancing the resilience to climate change of smallholder farmers in the Tambacounda and Kolda regions?			Tamba & Kolda	WFP
15/02/2018	How the 4R initiative contributed to the systematic use of organic fertilization methods at the expense of mineral fertilizers in the Kolda and Tambacounda regions?			Kolda & Tamba	WFP
18-19/12/2018	NEMA Key Stakeholders Validation Workshop to validate and concretize a number of policy documents developed by NEMA for the 8th Country Programme of FGN/UNDP Plan of Action.	ABU	70	Lagos, Nigeria	UNDP/NEMA
22-23/10/2018	National Conference on DRR	GBU, Tanà & USTHB	600	Algiers, Algeria	Government of Algeria
01-03/2018	Society of Southern African Geographers (SSAG) Academic Conference	SU	100	Bloemfontein, South Africa	SSAG, University of the Free State
2018/11/12	Pilot of the NEPAD 3PA: Trainers of Trainers	MAK	40	Entebbe, Isingiro	WFP
19-23/11/2018	Pilot of the NEPAD 3PA: Seasonal Livelihoods Programming training		45	Entebbe, Isingiro	WFP

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10-14/12/2018	Pilot of the NEPAD 3PA: Community-based Participatory Planning (CBPP)		35	Entebbe, Isingiro	WFP
05-06/10/2018	Technical feedback workshop of the National Strategy for Social Protection	Tanà	40	Antananarivo, Madagascar	MPPSPF
30/10/2018	Launch workshop of the 3PA approach in Madagascar		34		CERED/BNGRC
09-10/11/2018	Scientific seminar of UMI-Resiliences Madagascar		20		UMI-Resiliences Madagascar
30/01/2019	Constitution of the National Consultative Committee in the framework of the project		13		SAF FJKM
14/01/2019	Strengthen coherence between agriculture and social protection for resilience and rural poverty reduction		19		MPPSPF
18/01/2019	Gender Integration Workshop in ARC Operations		14		CPGU
13/02/2019	Technical consultation on defining the content and structure of new MAPROOMs for sectoral use		65		General Directorate of Meteorology (DGM)
06/12/2018	Meeting of the National Committee for Risk and Disaster Management		42		Prime Minister Office - Mahazoarivo
21/11/2018	Indicators for risks profiling Ghana	UG	25	Accra, Ghana	Ghana Government, National Disaster Management Organisation (NADMO)
13/03/2019	Meeting to discuss formulation of new Short Courses with National Delegate for Major Risks and other stakeholders	USTHB	13	USTHB, Algiers	USTHB, National Delegate for Major Risks
<b>Subtotal</b>			<b>1622</b>		
<b>Local</b>					
20/06/2018	Sharing of research findings with stakeholders	Ardhi	81	Temeke Municipality	Temeke Municipal Council
27/06/2018	African Risk Capacity (ARC) 2018-2019 operational plan validation	Tanà	35	Antananarivo / Madagascar	Cell of Prevention and Emergency Management/ Prime Minister's Office
15-25/08/2018	Community Based (GIS Based) Urban Risk Assessment in Bahir Dar City, Amhara Region, Ethiopia	BDU	Not available	Bahir Dar City, Ethiopia	BDU
01/08/2018-30/11/2018	GIS and Statistics with Excel	UDM	2	UDM	UDM
13/08/2018	Knysna Fire project inception meeting	SU	7	Council for Scientific and Industrial Research (CSIR) Stellenbosch	CSIR Stellenbosch
15-23/03/2019	Observing the local geology and high-rise buildings within the municipalities around mount Cameroon.	UBuea	10	Tiko, Mutengene, Buea, Limbe	UBuea
<b>Subtotal</b>			<b>135</b>		
<b>Total participants</b>			<b>2 238</b>		

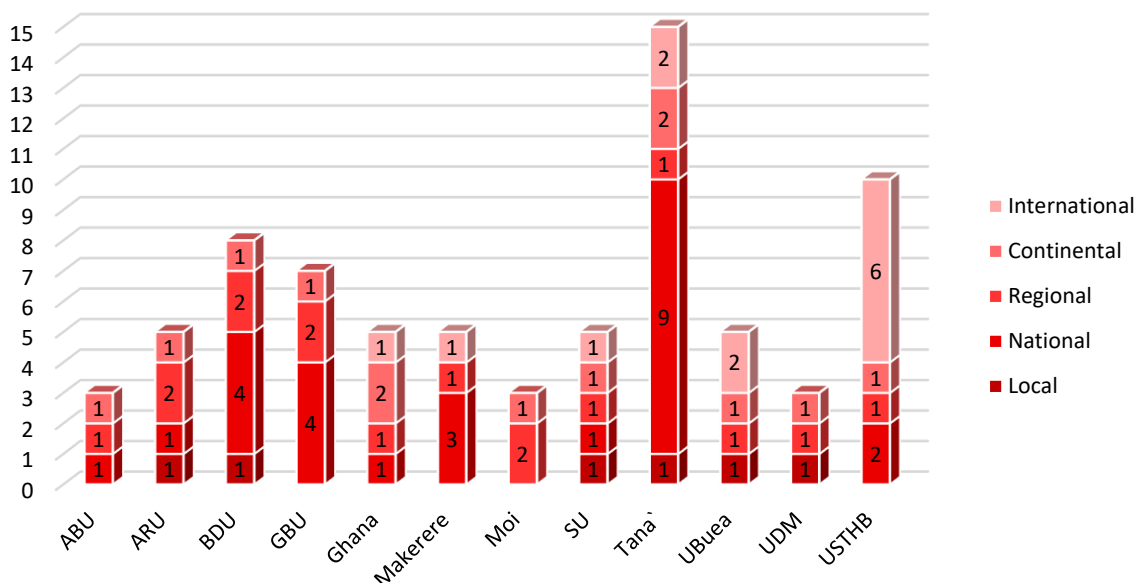


Figure 7: Technical engagements attended per partners from local to international scales between 26 May 2018- 25 May 2019

The greatest proportion of these engagements took place at national and local levels, signalling the specific value-added expertise that engaged HEIs can bring to risk and resilience efforts. Examples of partners’ involvement in technical engagements with other national based institutions and groups include **ABU’s** participation at the Nigerian Emergency Management Agency (NEMA) Validation Workshop, as a technical expert to discuss and critique several policy documents for the draft version of the 8th Country Programme of the Federal Government of Nigeria UNDP Plan of Action.

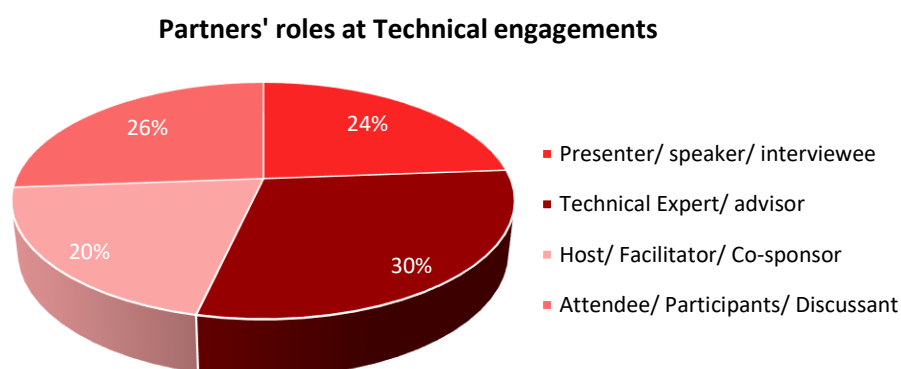
Several meetings were also held between **ARU**, **BDU** and **Tanà** and their WFP country offices to discuss the prospect of collaborating together to implement their adapted version of the 3PA to be applied to assess vulnerability and resilience within urban, displaced and refugee settings in their respective countries.

**USTHB** worked in collaboration with the Algerian Government’s National Delegation for Major Risks and the Ministry of Interior to hold the 1st National Conference on DRM “For a more resilient Algeria” held between 22 -23 October 2018. Over 700 participants, including scientists, academics, disaster management personnel, government officials from across Algeria attended the conference. Among those invited to present were representatives from **GBU** and **Tanà**. **Tanà** staff conducted a presentation titled “Disaster Risk Management and Sustainable Development: Challenge and Issues”.

At more localised levels, **UBuea** held several meetings with local experts and stakeholders (architects, property owners, structural engineers, builders, a civil engineer, and members of the media) to discuss the development and implementation of a building code for the Mount Cameroon area to reduce the risk of collapsing building and infrastructure during seismic events. **UBuea** and these local stakeholders have been collaborating to develop seismic hazard-sensitisation workshops with local communities, instructing them how to cope with various types of seismic-related hazards (i.e volcanic eruptions, earthquakes, mass movements, soil and water contamination, etc).

Periperi U partners were invited to attend significant technical events at international and continental scales, showcasing an acknowledgement of the gravitas that partners and the consortium hold among international institutions for their work and influence in the DR field. Such events included attendance of partners at the 2nd and 3rd GRAF expert meeting in Geneva in November 2018 and April 2019, to contribute towards discussions to develop a global framework to assess hazards, vulnerability and risks, and a global plan to reduce disaster losses.

It may also be worth noting that in previous years, Periperi U partners used to attend most technical events as mere participants or discussants, however figure 8 reveals that during this reporting period, partners took on more active roles at these events, being invited as presenters or technical experts, or even hosting and facilitating such events.



*Figure 8: Partners' roles at Technical engagements between 26 May 2018 – 25 May 2019*

### ***Collaborative engagements***

During this reporting period, the increasing traction on technical issues between Periperi U partners and other stake-holders was further advanced through formal *collaborating agreements*. In this context, four partners signed MoU's with other private sector, scientific/research institutions, government ministries or international agencies - signalling a growing recognition and faith in the capabilities and professionalism of Periperi U consortium and individual partners to work together with stakeholders across sectors, disciplines and geographic scales, as illustrated in Box 3. At the time of reporting **ARU** and **BDU** have had discussions with WFP about being involved in the 3PA pilot and are in the process of formulating MoUs between themselves and the WFP.

*Box 3: Illustrative examples of Memoranda of Understanding signed by Periperi U partners*

Formal Collaborative Agreements
<p><b>Makerere</b> signed an MoU with WFP to conduct the first pilot of the implementation of the NEPAD ARCH 3PA on the continent</p>
<p><b>SU</b> signed contracts CSIR and Santam to collaborate on the 2017 Knysna Fires Post-Event Assessment research project.</p> <p><b>SU</b> (as secretariat) signed MoUs with UNDP, WHO and SU’s African Doctoral Academy to assist in supporting logistical arrangements and participating in training for ARMS I</p>
<p><b>Tanà</b> signed an MoU with:</p> <ul style="list-style-type: none"> <li>- MEDAIR, an independent emergency and rehabilitation International NGO to collaborate on capacity building and training, research projects and internship opportunities for <b>Tanà</b> students.</li> <li>- MPPSPF o collaborate on risk-related research and training of MPPSPF Staff.</li> <li>- Madagascar’s WFP office to assist in piloting the implementation of the NEPAD ARCH 3PA.</li> <li>- WHH (Welt Hunger Hilfe), a German Non-Governmental Organisation, to support and encourage increased disaster risk-related research, particularly in drought-prone regions in Madagascar.</li> </ul>
<p><b>UDM</b> signed an MoU with Maragra Açucar SA to develop and promote practical laboratory classes, scientific research and innovation, the holding of symposia, colloquia, workshops, training and internship opportunities for <b>UDM</b> students</p>

## 4. SECRETARIAT REPORT

### 4.1 Overview of secretariat support

During this reporting period, **SU**, in its capacity as the Periperi U secretariat, continued to provide support to the consortium. The secretariat was also responsible for planning and facilitating the attendance of partners at strategic events such as the 2018 AfARP in Tunis, and the 2019 GPDRR in Geneva.

### 4.2 Operational support for core Periperi U activities

The secretariat’s operational support included assistance for the day-to-day running of the consortium (including financial management and reporting to USAID). As Periperi U project manager, **RADAR/SU** oversaw compliance with award terms and conditions, facilitated transfers of funds, secured international flight authorisations and ensured reporting compliance as required by the current grant. In addition, the secretariat prepared and submitted advance requests to USAID/OFDA that resulted in the disbursement of USD 805 002.23 to 11 sub-awardees. In late June 2018, a new project accountant was appointed to oversee the financial management of the consortium.

Altogether, during the reporting period, **RADAR/SU** reserved and paid for 42 international flights for partner travel. This included international flights for the partners to attend both the AfARP in Tunisia 2018, as well as the GPDRR in Geneva 2019.

### 4.3 Facilitation of strategic international engagement and cooperation

The secretariat also oversaw extensive preparatory arrangements such as travel, accommodation and drafting meeting programmes for several strategic events. This included its coordinating role for the

Africa-based research teams including **Makerere** and **UDM**) in the Forecasts for Anticipatory Humanitarian Action (FATHUM) initiative, the **SU** provided organisational support for the annual consultation meeting in Stellenbosch between 16 -18 June 2018.

The secretariat was primarily focused on overseeing preparatory arrangements such as travel, accommodation and drafting meeting programmes for AfARP and Periperi U Annual Consultative Meeting, which took place in Tunis, Tunisia from 9 - 13 October and 14 - 15 October respectively.

The secretariat has been coordinating travel arrangements and logistics for upcoming events such as the African Working Group meeting between 2 - 5 April 2019 in Addis Ababa Ethiopia, and the GPDRR to take place between 13 - 17 May 2019 in Geneva Switzerland. Preparations for the Global Platform have included booking of flights, accommodation and visa letters for representatives from each of the partners, as well as a meeting venue for an internal meeting for the partners. The secretariat has also begun preparations for the 2019 annual consultative meeting which will take place in Antananarivo, Madagascar.

#### 4.4 Facilitation and coordination of ARMS

During this reporting period, the Periperi U secretariat coordinated the organisation of the ARMS I with **ARU**, the host partner. This included the developing of budgets, coordinating with partners on streamlining and consolidating the teaching themes and academic curricula, the reviewing and assigning of teaching staff, as well as writing information and promotional materials to post online to inform prospective applicants about the School. The secretariat also held preparatory discussions with UNDP and WHO on their participation in the School, along with **SU's** ACS and ADA.

Between 5 - 21 September 2018, two secretariat staff members travelled to Tanzania to assist **ARU** as support staff during the implementation of ARMS, to oversee and assist in setting up venues, teaching materials, flash drives, conducting onsite registration for ARMS opening and running day-to-day admin. The secretariat staff also assisted with the ARMS 'wrap up' which included writing an ARMS I evaluation report and following up on unresolved issues such as late participant payments and financial matters. The secretariat ARMS team was also in the process of assisting **GBU** staff with developing and preparing ARMS II to be hosted in Senegal in February 2019. This included creating new advertising, translating documentation and information, developing new webpages, and drafting a curriculum with partners. However, with the sudden and unexpected passing of Professor Diack, ARMS II was postponed with all preparations and developments paused until a decision about going forward is decided.

#### 4.5 Periperi U Phase IV Evaluation

The evaluation of Phase IV of the Periperi U partners officially began with a representative of the evaluation team joining the partners at the annual consultative meeting to introduce themselves and establish points of contact. The evaluation team held several interviews via electronic communication (i.e. email, Skype, WhatsApp and zoom) The Secretariat provided the evaluation team with quarterly report data and reports from 2015 – 2018 to review. On 3 December, the evaluation team also held a workshop in Stellenbosch South Africa to gauge the activities and responsibilities of the secretariat team as well as the **SU** researchers and teaching staff.



The final draft report was submitted on 23 April 2019 – in anticipation of the GPDRR 2019 in Geneva. The evaluation outlines key deliverables by the consortium over the period and offered insights into the evolving nature of the consortium stating “...Periperi U, as this web of dynamic interconnections, reflect the principles of complex (adaptive) evolving systems. This is best served by a logic model and theory of change that goes beyond linear thinking...”

The Secretariat continued to provide support and information to the Periperi U Phase IV Evaluation team during this quarter. For much of this reporting period the evaluation report was being drafted and finalised by the evaluation team. The Evaluation report is set to be finalised and released in April of the following quarter, prior to the GPDRR 2019 in Geneva.

#### 4.6 Online platforms and Online Research Centre (ORC)

The Secretariat continued to manage and update its online platforms, namely the [www.riskreductionafrica.org](http://www.riskreductionafrica.org) website and its Facebook page to ensure a strong online presence. These platforms provide information on each of the partner’s academic courses, advertise short courses as well as report on consortium related events and news. The various platforms helped advertise ARMS and provide information to interested persons. The Secretariat built an online registration form and embedded this into the webpage of the ARMS to allow prospective participants to apply for the School’s courses electronically.

During this reporting period, the ORC saw a massive increase in the number of searches performed between December 2018 and February 2019, reaching over a million searches over January and February, which can be seen illustrated in figure 9 below.

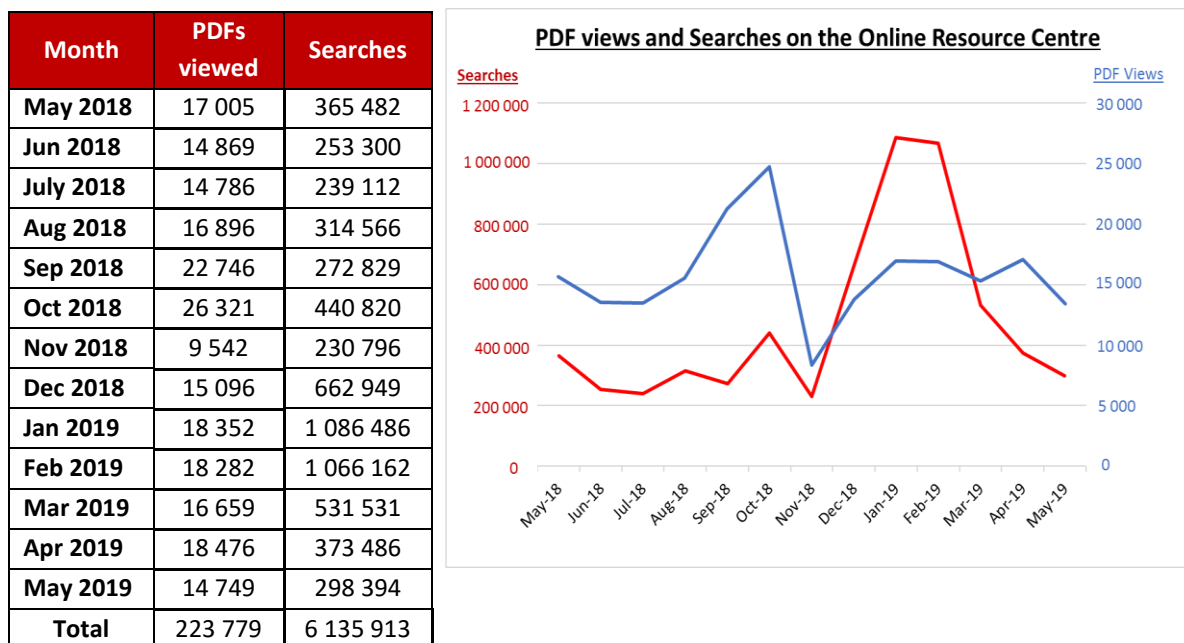


Figure 9: PDF views and Searches on the Online Resource Centre 2018 – 2019

Searches then decreased to half a million searches in March 2019 before appearing to return to average searches numbers for April and May. It is not certain what caused the sudden increase and decrease, however, a possible explanation for increased traffic on the ORC could be related to Periperi U’s attendance at the AfARP, in which the ORC and websites were advertised by partners. Similarly,

the number of PDFs viewed also experienced a spike between September and October 2018, whose cause is not known. Overall the number of searches for this period reached 6 135 913 and 223 779 PDF views, an increase of 237.8% and 141% respectively since the previous annual reporting period.

## 5. PROGRAMMATIC CONSTRAINTS

### 5.1 Overview

Although the consortium and its partners have enjoyed an active and successful year, there have been challenges and obstacles that disrupted academic programmes and outreach activities. These included persisting obstacles to student financing, staffing challenges, political disruptions, slow university approval processes for introducing new cross-disciplinary curricula, as well as uncertainty on consortium-wide funding. While many core academic activities at university level are embedded institutionally, consortium-wide activities that have had transformative effects on pan-African DRM capacity, require sustained external support. This represents an urgent priority to address.

### 5.2 Obstacles to student financial support

As already noted, (see 3.5.2), many students continued to struggle to support themselves financially, with funding obstacles delaying study completion or forcing student withdrawal from academic programmes. **GBU** and **UG** observed that their students are struggling to complete their programmes on time for various reasons (external work commitments, poor accessibility to academic resources off campus, lack of funds etc.). **UDM** also stated that it had experienced a significant decline in student enrolment, with only 33 out of an estimated 70 students registering at the beginning of their academic year, which they believed has been as a result of a ‘profound economic crisis’ experienced in the country throughout 2018

This represented a disproportionately high burden for women students, who were more likely to withdraw from courses than their male counterparts or took longer to complete their programmes. Constrained financial support at post-graduate levels ultimately deters talented women from pursuing studies at doctoral levels. This translates into the poor progression of women into early career disaster risk-related academic and research positions – which was materially reflected in the consortium’s highly skewed gendered staffing profile, which remains predominantly male.

It was also observed by **ABU**, **Makerere** and **Moi** that they struggled to host short course training because of financial constraints, particularly from the perspective of their target audiences, local government officials and community members, who may not have financial resources available to sponsor participants to attend courses. **Makerere** has attempted to provide minimal financial assistance through their own funds to enable students to attend the course, at a possible cost to the university. Similar issues were experienced during the implementation of ARMS, in which several prospective participants who were eager to attend did not have the available financial resources to afford to attend.

### 5.3 Staffing challenges

Many partners remain challenged in recruiting or retaining sufficient and skilled human resources to cater for their various activities such as teaching, research and programme administration. Partners

such as **Makerere** continued to struggle to recruit qualified and experienced core academic staff to deliver quality teaching and supervision of students for its academic programmes. Consequently, many partners are forced to rely on a small core group of staff to ‘wear many hats’, having to take on a number of responsibilities and oversee many complex processes.

As mentioned in section 3.4.1, the partners have seen the departure of two key personnel, the unexpected passing of the director of **GBU** and the resignation of the **SU**/secretariat director. In both instances, this has also resulted in challenging transition **arrangements to** provide for programme continuity. This is due to the multidimensional character of the disaster risk domain, including its complex political, multi-scalar and cross-disciplinary identity. **SU** faces particular challenges in identifying a successor director for Periperi U secretariat support.

#### 5.4 Political disruptions and unrest

Political instability and unrest have been the main obstacle highlighted by several partners during this reporting period, constraining their activities such as short courses, strategic engagements and research. In Ethiopia, the country’s state of emergency which came to an end in June 2018, as well as its aftermath, continued to hinder much of **BDU’s** activities and development including delaying approval of its new academic programmes, and the establishment of its satellite campus in Addis Ababa.

Similarly, **Moi** experienced several strikes by its university staff between 2017 and 2019, which continually hampered and delayed the implementation of their academic programmes and supervision of students, as well as their ability to host short courses throughout this reporting period.

Persisting unrest in Cameroon disrupted **UBuea’s** research and teaching during much of this reporting period. In particular, access to internet and electricity was periodically interrupted, posing substantial obstacles to **UBuea** staff to communicate with the Secretariat as well as other stakeholders in Cameroon and beyond. Several activities such as workshops and short courses had to be cancelled because of safety concerns. While the unrest has not caused the cancellation of classes or the academic programme, there has been a major concern about the safety of students and their ability to continue their studies. Although **UBuea** had planned to apply to host the 2020 International Conference on “Cities on Volcanoes”, prevailing political uncertainty and insecurity in the region have made this untenable.

#### 5.5 Slow approval time-frames for new academic programmes

A recurrent challenge reported has been the slow, multi-layered process for approving new academic programmes. This has been particularly experienced by partners such as **BDU, Moi, UG** and **SU**, who have been awaiting approval to implement new programmes from internal university structures to national ministries of higher education extending beyond two-three years. The protracted nature of such approval processes underlines the importance of sustained institutional advocacy and tenacity within individual universities, as well as in-depth knowledge of the complex navigational steps and stakeholders involved.

## 5.6 External funding

Despite continuing evidence of successful, sustainable, Pan-African capacity building in the disaster risk domain, external funding options remain constrained after the current USAID agreement concludes in November 2019. The secretariat has initiated numerous discussions with potential funding partners to provide consortium support post-November. While short-term project-type funding for workshops, training and meetings can be sourced, efforts to secure core support have yet to realise concrete results.

## 6. CONCLUSION

During this third and final year of the USAID 2016-2019 award, the Periperi U consortium of partners has demonstrated resolve and innovation in its activities, seeking to enhance its capacity, reach and impact. The Partners continued to expand and innovate academic and training activities through introducing new and revising existing programmes and courses. This also included the piloting of a new summer school styled training course designed to make DR-related training more accessible and relevant to local issues. Gradual transformation in female representation is beginning to take root with a greater proportion of women enrolled in academic and short course training programmes.

Periperi U also has expanded its reach and potential influence through greater technical collaborations between partners and other stakeholders from local to global levels through partnerships with local government offices as well as international institutions such as the UNDP, WFP and World Bank. The inclusion of Periperi U staff on continental bodies such as the STAG, A-STAG and AYAB provide platforms for greater advocacy for the role of academia and HEIs in the field of DR. All of which demonstrates the potential contribution HEIs can make towards enhancing continental capacity to reduce risk.

Periperi U's reach appears to be expanding furthermore online with increased traffic on the ORC, surpassing all expectations with over 6 million views throughout this reporting period.

Despite many challenges and obstacles faced by partners, particularly **UBuea**, which hampers growth and development, the partners have shown their own internal resilience and fortitude as a consortium to make significant gains in research, teaching and engagement. They also underline the value-added that many engaged HEIs are already bringing to risk and resilience efforts across Africa, especially in at-risk, resource-constrained environments.

As noted earlier, there is urgency to address the need for continuation funding post-November 2019.

