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## Periperi U\*

Annual Report for the Period

26 May 2016 to 25 May 2017



June 2017

Research Alliance for Disaster Risk Reduction (RADAR)

Stellenbosch University

SOUTH AFRICA



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Partners Enhancing Resilience for People Exposed to Risks

<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 2016 TO 25 MAY 2017

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## EXECUTIVE SUMMARY

In 2017, after nearly ten years of incremental expansion, the Periperi U partnership continued to demonstrate the benefits of sustained investment in disaster risk-related higher education. In this reporting period, the collaboration actively engaged the twelve 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)
- University of Antananarivo Centre D’Etudes et de Recherches Economiques pour le Developpement (CERED), (Antananarivo, Madagascar)
- Ahmadu Bello University Center for Disaster Risks Management and Development Studies (Zaria, Nigeria)
- University of Buea (Buea, Cameroon)

Building on a decade of incremental capacity development, the first year of Periperi U’s 2016-2019 USAID award,<sup>1</sup> reflected progress at all levels. With the consortium’s expansion to include Ahmadu Bello University (Nigeria) and the University of Buea (Cameroon), during 2016-17, a **remarkable 1 620 students** were enrolled in disaster risk-related academic programmes and modules. Beyond this measurable growth in student numbers however, the evolving character of the partnership’s programmes and collaborations also underlines the relevance and resilience of committed higher education institutions in building disaster risk-related capacity in Africa

In 2016-2017, these capabilities were even more sharply underlined, given that funding flows from the current grant reached most Periperi U partners only in January 2017. This was eight months after expenditure was first authorised (May 2016) and 12-15 months after sub-awardee funding for the previous grant concluded (October-December 2015).

Over this difficult period, the continuity and resilience of Periperi U partners’ disaster risk-related academic programmes and modules underline the benefits of integrating new teaching, learning and research within existing university programmes and structures. In 2016-2017, these attributes were further maximised in each partner due to the expertise, resourcefulness, inventiveness and commitment of their respective focal points and staff.

Partner commitment to expanded disaster risk-related capacity and research was materially reflected in the significant expansion of human resources to **217 core and adjunct faculty** (up from 170 in previous reports). This expansion was essential to accommodate the growth in disaster risk-related undergraduate and post-graduate programmes. There are now **18 undergraduate/post-graduate programmes** offered, in addition to **20 disaster risk-related modules** incorporated within other academic programmes.

These changes represent a significant increase from 2016, in which the partnership offered 12 programmes and nine modules. Altogether, **1 620 students were enrolled**, including 578 undergraduate students and 646 women, signalling an encouraging trend in women’s engagement in this field.

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

With respect to **short course delivery** during 2015/16, Periperi U partners offered seven short professional courses that reached **370 participants** (see Table 1). As with planned community outreach activities, this year's funding constraints unfortunately curtailed partner capacity to implement project activities outside of the core academic programmes, including the hosting of short courses.

Despite limited funding, however, and in keeping with the Sendai Framework's call for increased involvement of science and academia in efforts to reduce risk, partners enhanced their emphasis on disaster risk research. With *understanding risk* a central priority in the Sendai Framework, efforts by Periperi U staff and students resulted in more than 200 student disaster risk-related research projects and **62 publications**. These included **39 peer-reviewed journal articles**, reflecting Africa's wide-ranging and highly dynamic risk profile.

Similarly, the partnership's commitment to work closely with diverse stake-holders across multiple scales resulted in more than **50 strategic engagements** in the past year. These included active participation in the Africa Working Group on Disaster Risk Reduction as well as the 6<sup>th</sup> Africa Regional Platform for Disaster Risk Reduction in Mauritius and the Global Platform in Cancun. Along with a wide range of local, (sub) national and regional collaborations, these engagements have reinforced recognition of the crucial role higher education plays in advancing disaster risk reduction – especially in Africa.

The fast-paced demands from both within and outside the partnership placed substantial pressure on the **SU/RADAR secretariat**, reflected both administratively and logistically. From December 2016 – May 2017, SU disbursed **USD 629 892 to 11 sub-awardees**. It also reserved and paid for **27 international flights** for partner travel. In addition, SU/RADAR updated Periperi U's website<sup>2</sup> for greater accessibility, also expanding the partnership's online research centre or *ORC*<sup>3</sup>. During the 2016-17 reporting period, Periperi U's ORC recorded a staggering 1.7 million searches, with 166 000 pdfs viewed.

Despite challenges experienced and tight financial environment, Periperi U achieved considerable progress during 2016-2017. While the original proposal anticipated a three-year target of 5 784 students in disaster risk-related programmes and modules, in 2016-17 alone, the partnership reached 1 620 students. While there were set-backs to community outreach and short-course participation, consortium members substantially expanded their capability for integrated disaster risk research and capacity for strategic engagement.

The Periperi U model of purposefully mobilising higher education to advance disaster risk reduction continues to underscore the benefits of integrating new teaching, learning and research within existing university programmes and structures. This is especially the case in sub-Saharan Africa, where there are pressing needs for skilled human capital. Going forward, the partnership will place heightened emphasis on diversified funding mechanisms for student internships, so that future graduates can anticipate work prospects that are personally fulfilling, as well as benefit the communities in which they work.

Table 1 below provides a snapshot of the partnership's reach in short course training and formal academic programmes over the past year. It signals solid progress in advancing Africa-based disaster risk scholarship, even under conditions of funding duress.

These and other activities undertaken by Periperi U are addressed in greater depth in the following report.

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

<sup>3</sup> [www.lib.riskreductionafrica.org](http://www.lib.riskreductionafrica.org)

**Table 1: Summary of Periperi U Training/Education Efforts (26 May 2016 - 25 May 2017)**

Institution	Short Courses	People	Academic	Students
ABU**	1	190	5	388
ARU	1	43	1	52
BDU	1	45	4	325
GBU	-	-	1	109
Ghana*	-	-	4	48
Makerere	1	12	5	132
Moi*	-	-	2	54
SU***	1	5	2	30
Tanà***	1	25	5	70
UBuea	-	-	5	113
UDM	-	-	2	200
USTHB	1	50	2	99
<b>Total</b>	<b>7</b>	<b>370</b>	<b>38</b>	<b>1 620</b>

\* Modules, not full programmes

\*\* 109 total includes 26 postgraduate diploma students

\*\*\* Includes Masters 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 Univeristy, Ethiopia
<b>CERED</b>	Centre D’Etudes et de Recherches Economiques pour le Developpement
<b>DMTC</b>	Disaster Management Training Centre
<b>GBU</b>	Gaston Berger University, Senegal
<b>LBE</b>	Built Environment Research Laboratory
<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

### Abbreviations and acronyms

<b>AfRP</b>	Africa Regional Platform
<b>AWGDRR</b>	African Working Group on Disaster Risk Reduction
<b>BNGRC</b>	Bureau National de Gestion des Risques et des Catastrophes
<b>BSc</b>	Bachelor of Science
<b>CAR</b>	Canadian Physicians for Aid and Relief
<b>COMM</b>	Commissioned
<b>CONF</b>	Conference Proceedings
<b>DMGRC</b>	Multidisciplinary Disaster and Risk Management Master Programme
<b>DRM</b>	Disaster Risk Management
<b>DRR</b>	Disaster Risk Reduction
<b>EAC</b>	East Africa Community
<b>EPR</b>	Emergency Preparedness Response
<b>FAO</b>	Food and Agriculture Organisation
<b>FUT</b>	Federal University of Technology
<b>GAEC</b>	Ghana Atomic Energy Commission
<b>HEI</b>	Higher Education Institution
<b>ICSU</b>	International Council for Science
<b>IDP</b>	Internally Displaced Person
<b>IFAD</b>	International Fund for Agricultural Development
<b>IRDR</b>	Integrated Research on Disaster Risk
<b>LIRA</b>	Leading Integrated Research Agenda 2030 in Africa
<b>MA</b>	Masters of Art
<b>Mphil</b>	Masters of Philosophy
<b>MSc</b>	Masters of Science
<b>MSc DRM</b>	Master of Science in Disaster Risk Management
<b>MTI</b>	Medical Teams International
<b>NDC</b>	National Data Centre
<b>NDMR</b>	National Delegation for Major Risks

<b>NEPAD</b>	New Partnership for Africa's Development
<b>NGO</b>	Non-government organisation
<b>NYSC</b>	National Youth Service Corps
<b>OFDA</b>	Office of Foreign Disaster Assistance
<b>ORC</b>	Online Resource Centre
<b>PARM</b>	The Platform for Agricultural Risk Management
<b>Periperi U</b>	Partners Enhancing Resilience for People Exposed to Risks
<b>PDF</b>	Portable Document Format
<b>PGDip</b>	Post Graduate Diploma
<b>PhD</b>	Doctor of Philosophy
<b>PoA</b>	Programme of Action
<b>Progs</b>	Programmes
<b>REaL</b>	Risk, Education and Learning
<b>SAP/C</b>	Système d'Alerte Prompt/Communautaire
<b>URCS</b>	Ugandan Red Cross Society
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>UNISDR</b>	United Nations International Strategy for Disaster Reduction
<b>USAID</b>	United States Agency for International Development

## 1. Progress Overview

Building on a decade of incremental capacity development, the first year of Periperi U's 2016-2019 USAID award,<sup>4</sup> reflected progress at all levels. With the consortium's expansion to include Ahmadu Bello University (Nigeria) and the University of Buea (Cameroon), during 2016-17, a **remarkable 1 620 students** were enrolled in disaster risk-related academic programmes and modules. Beyond this measurable growth in student numbers however, the evolving character of the partnership's programmes and collaborations also underlines the relevance and resilience of committed higher education institutions in building disaster risk-related capacity in Africa

In 2016-2017, these capabilities were even more sharply underlined, given that funding flows from the current grant reached most Periperi U partners only in January 2017. This was eight months after expenditure was first authorised (May 2016) and 12-15 months after sub-awardee funding for the previous grant concluded (October-December 2015).

Over this difficult period, the continuity and resilience of Periperi U partners' disaster risk-related academic programmes and modules underlined the benefits of integrating new teaching, learning and research within existing university programmes and structures. In 2016-2017, these attributes were further maximised in each partner due to the expertise, resourcefulness, inventiveness and commitment of their respective focal points and staff.

Despite limited funding, however, and in keeping with the Sendai Framework's call for increased involvement of science and academia in efforts to reduce risk, partners enhanced their emphasis on disaster risk research. With *understanding risk* a central priority in the Sendai Framework, efforts by Periperi U staff and students resulted in more than 200 student disaster risk-related research projects and **62 publications**. These included **39 peer-reviewed journal articles**, reflecting Africa's wide-ranging and highly dynamic risk profile.

Similarly, the partnership's commitment to work closely with diverse stake-holders across multiple scales was reflected in more than **50 strategic engagements** in the past year. These included active participation in the Africa Working Group on Disaster Risk Reduction as well as the 6<sup>th</sup> Africa Regional Platform for Disaster Risk Reduction in Mauritius and the Global Platform in Cancun. Along with a wide range of local, (sub) national and regional collaborations, these engagements have reinforced recognition of the crucial role higher education plays in advancing disaster risk reduction – especially in Africa.

Consistent with the current grant's objectives to mobilise the consortium to advance disaster risk-related scholarship and practice in Africa, this 2016/17 report foregrounds accelerating levels of Periperi U engagement at local, national, continental and global scales, as well as evidence of expanding disaster risk research capabilities across the partnership.

This 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 Disaster Risk Reduction

Periperi U activities for this sub-sector aimed to promote global and continental awareness of the role higher education institutions potentially play in advancing disaster risk reduction, along with mobilising material support to better enable this, particularly in at-risk developing countries.

During 2016/2017 period, consortium members, individually and collectively, advocated for higher education's role in DRR education, capacity building and research through participation in 31 regional, continental and international events. These included the Secretariat's engagement at the 9<sup>th</sup> and 10<sup>th</sup>

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<sup>4</sup> USAID award AID-OFDA-G-16-00115

Sessions of the Extended African Working Group on Disaster Risk Reduction (AWGDRR) jointly convened by the Africa Union and UNISDR.<sup>5,6</sup> This was in Periperi U's capacity as the continental representative for Science and Academia on the AWGDRR. The consortium's advocacy efforts were also reflected in its participation at the **6<sup>th</sup> Africa Regional Platform on DRR (AfrP)**, convened in Mauritius (22-25 November, 2016) as well as through the efforts of a 'lean' Periperi U delegation that attended the **6<sup>th</sup> Global Platform on DRR in Cancun, Mexico** (24-26 May, 2017).

Periperi U's specific advocacy interventions at the **2016 AfrP** involved convening a Science and Technology pre-event on *Maximising our momentum: Science, technology and academic partnerships for disaster risk reduction in Africa*, as well as a side-event on *Strengthening Science, Technology and Academic Engagement in Implementing the Yaoundé Framework in Africa*. The partnership also staffed an exhibition booth, in collaboration with the International Council of Science.

In addition to organising pre- and side-events, a Periperi U representative participated in the plenary panel on 'Understanding Risk'<sup>7</sup>. The partnership also ensured active Science and Technology representation on the drafting committee for the Africa Programme of Action (PoA) for DRR (Makerere University), and presented a formal statement from the science, technology and academic communities in the final sessions<sup>8</sup>.

These concerted efforts ensured that the Africa Programme of Action 2015-2030<sup>9</sup> explicitly profiled the role of education, training and research. One noteworthy inclusion within the PoA was specific mention of the urgency for student funding to improve the reach of capacity-building programmes. This crucial advocacy intervention now provides the policy leverage for follow-through at continental, regional and (sub) national levels.

Six months later, at the **2017 Global Platform on DRR** in Cancun, the Periperi U Secretariat's *Ignite Stage* presentation, "*REaL*" *Innovation in DRR: Insights on risk education and learning from Africa*<sup>10</sup>, described the benefits of investing in higher education to advance the Sendai Framework's priorities. This drew heavily on Periperi U's model of trans-boundary, adaptive disaster risk-related curricula that mobilises mutually reinforcing interventions to align disaster risk-related academic efforts with risk reduction needs.

### 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 disaster risk reduction efforts through five interlinked strategies. These included improving the consortium's collective effectiveness as well as its continued expansion. At the level of individual universities, they included actions to better institutionally embed DRM capacity building and research, combined with expansion of the core disaster risk academic activities. The fifth component comprised a deliberate focus on partner strategic engagement across multiple scales and stake-holder groups

#### 3.2 Advancing consortium effectiveness and expansion

Periperi U's effectiveness at consortium-scale was enabled by streamlined systems for managing sub-recipient awards as well as complex performance and financial reporting. November 2016 – April 2017, implementing agreements for all eleven sub-awardees were signed, along with the certifications

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<sup>5</sup> This meeting was held 7-8 March 2017 in Addis Ababa, Ethiopia

<sup>6</sup> This meeting was held 25-26 October 2016 in Livingston, Zambia

<sup>7</sup> Please see <http://www.iisd.ca/isdr/afrrp6drr6/html/enbplus141num8e.html>

<sup>8</sup> Please see [http://www.riskreductionafrica.org/wp-content/uploads/2016/11/STAC-statement\\_2016\\_23-November\\_1GF.pdf](http://www.riskreductionafrica.org/wp-content/uploads/2016/11/STAC-statement_2016_23-November_1GF.pdf)

<sup>9</sup> Please see [http://www.unisdr.org/files/49455\\_poaforsendaiimplementationin africa.pdf](http://www.unisdr.org/files/49455_poaforsendaiimplementationin africa.pdf)

<sup>10</sup> Please see <http://www.radar.org.za/news-and-events-base-1/news-base-1/periperi-u-ignite-stage-presentation-at-the-global-platform-cancun-2017.html>

required by Stellenbosch University's *Anti-Trafficking Compliance Plan for USAID-Funded Activities Implemented through the Periperi U Programme*. In addition, all sub-awardees compiled work plans for the first year that outlined their proposed budgets and activities.

Building on its effectiveness to work across a diversity of university partners, in 2016, the consortium expanded to include the **University of Buea (Cameroon) and Ahmadu Bello University (Nigeria)**. Despite exacting demands faced by both universities in the past year (eg delayed transfer of funds, as well as extended political disruption in Cameroon), together they reached more than 500 students in ten disaster risk-related programmes and modules. This achievement reflected the determination of their respective university teams, along with support provided by established Periperi U partners.

In addition to extending the Periperi U architecture continentally, in-country university programmes also began to extend the reach of their capacity building, technical support and disaster risk research services through relationships with local, national, regional and international bodies. For instance, GBU, together with other Senegalese universities, entered into a partnership with the Ministry of Agriculture and the Platform for Agricultural Risk Management (PARM), Food and Agriculture Organisation (FAO) and the International Fund for Agricultural Development (IFAD). Through this collaboration, GBU is tasked to conduct a comprehensive survey on issues of food insecurity, vulnerability and resilience across Senegal's different agricultural regions.

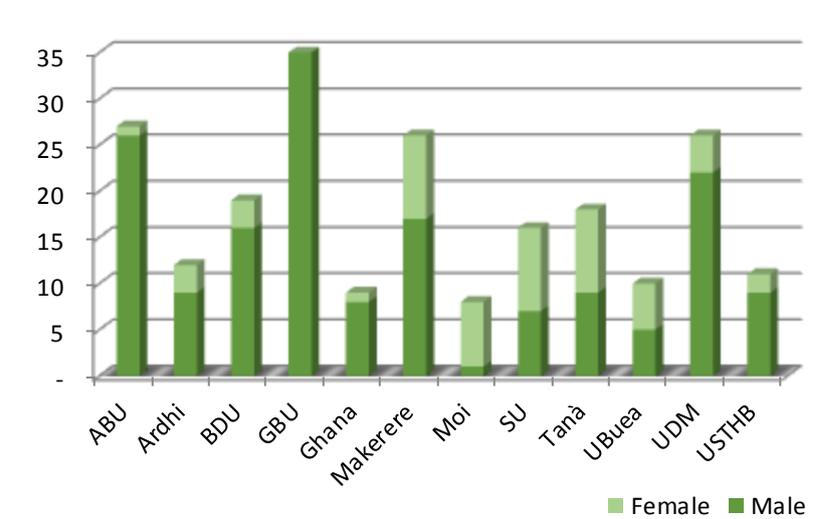
### 3.3 Institutional embedding of DRM academic activities and staffing expansion

With rapidly growing demand in Africa for both under- and post-graduate courses in the disaster risk field, Periperi U partners have needed to be inventive to meet this increased need. For instance, during this reporting period, both UDM and SU sought to establish more enabling institutional arrangements for their evolving and growing programmes. UDM's Periperi U team resolved to reposition its activities and report directly to UDM's Rector, rather than the School of Engineering. This was accompanied by an expanded remit to offer consultancy services to increase the team's financial sustainability. Similarly, at SU in March 2017, RADAR's Governance Committee recommended that the Centre transition beyond its current host department (Geography and Environmental Studies) to become a centre for inter-disciplinary risk studies, reporting directly to the Faculty of Arts and Social Sciences.

Similarly, in response to growing student numbers, the consortium staffing grew by 29% in 2016-17. Periperi U partners reported that 217 staff members were engaged across the partnership, up by 49 from the previous year (although 37 staff positions were attributed to ABU and UBuea). Of the current staffing complement, 53 were women, 24% of those engaged (see Figure 1).

**Table 2: Staffing distribution by gender: Periperi U (26 May 2016 - 25 May 2017)**

	Phase IV (Y1: 2016/17)								
	Core			Adjunct/ Support			Total Male	Total Female	Total Staff
	M	F	Total	M	F	Total			
ABU	20	-	20	6	1	7	26	1	27
ARU	6	1	7	3	2	5	9	3	12
BDU	16	3	19	0	0	0	16	3	19
GBU	21	-	21	14	0	14	35	-	35
Ghana	8	-	8	0	1	1	8	1	9
Makerere	6	4	10	11	5	16	17	9	26
Moi	-	6	6	1	1	2	1	7	8
SU	2	8	10	5	1	6	7	9	16
Tanà	5	3	8	4	6	10	9	9	18
UBuea	5	2	7	0	3	3	5	5	10
UDM	4	1	5	18	3	21	22	4	26
USTHB	4	1	5	5	1	6	9	2	11
<b>Total</b>	<b>97</b>	<b>29</b>	<b>126</b>	<b>67</b>	<b>24</b>	<b>91</b>	<b>164</b>	<b>53</b>	<b>217</b>



**Figure 1: Periperi U staff distribution, by university and gender (26 May 2016 - 25 May 2017)**

While gender parity remains a persisting challenge across the partnership, there are signs of gradual change (especially in more established university programmes) and as qualified women at masters and PhD levels take-up positions when these become available.

In another encouraging development in the past year, four staff members from Makerere University, Tanà, BDU and ARU either graduated or became poised to graduate with disaster risk-related PhD qualifications. Not only does this reflect progress in purposefully building skilled in-country research capability—it also expands capacity in their respective universities for post-graduate supervision as well as providing for institutional succession and continuity.

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

#### **3.4.1 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 initiative has augmented this by explicitly emphasising 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 port-folio that includes disaster risk-related academic programmes, practitioner short courses risk research and outreach. Although 2016's tight funding environment constrained implementation of some of these components, noteworthy progress was made – especially in the academic programmes offered as well as in disaster risk research.

#### **3.4.2 Academic programmes and modules**

##### Overview of courses and students

During 2016-17, the Periperi U partnership offered 18 disaster risk-related academic programmes and 20 modules to 1 239 and 381 students respectively, reaching 1 620 students. These included five new academic programmes at ABU, BDU and USTHB, along with a new undergraduate module offered at Moi in *Disaster Preparedness and Management*. Table 3 lists the disaster risk-related courses offered across the consortium, underlining the diversity of sectoral/disciplinary subjects covered. These include DRM-specific programmes offered by ABU, ARU, BDU and Tana, along with disaster risk-related modules nested within specific practice fields and disciplines such as economics, environmental science and public health.

Altogether, women constituted 646 of the students enrolled (39.9%), with 124 and 102 women students registered at UDM and ABU respectively.

**Table 3: Disaster risk-related academic programmes and modules offered by Periperi U partners (26 May 2016 - 25 May 2017)**

Institution	Course Name	Type	Total	New
<b>Post-graduate Programme</b>				
ABU	Disaster Risk Management and Development Studies	PGDip	45	
	Disaster Risk Management and Development Studies	MA	134	
	<b>Disaster Risk Management and Development Studies</b>	<b>MSc</b>	<b>168</b>	<b>x</b>
	<b>Disaster Risk Management and Development Studies</b>	<b>Mphil</b>	<b>37</b>	<b>x</b>
	<b>Disaster Risk Management and Development Studies</b>	<b>PhD</b>	<b>4</b>	<b>x</b>
ARU*	Disaster Risk Management	Masters	52	
BDU	Disaster Risk Management and Sustainable Development	MSc	109	
	Disaster Risk Management and Sustainable Development - distance	MSc	61	
	<b>Climate Change &amp; Development</b>	<b>MSc</b>	<b>5</b>	<b>x</b>
GBU	Prevention & Risk Management of Food Insecurity Risk	MSc	109	
Makerere	Public Health Disaster Management	Masters	14	
SU	Disaster Risk Studies & Development	MPhil	7	
Tanà	DMGRC Master's programme	MPhil	45	
UDM	Technical Education, Development and Disaster Management	MSc	30	
USTHB	<b>Structural Dynamics and Earthquake Engineering</b>	<b>MSc</b>	<b>94</b>	<b>x</b>
	Structural Dynamics and Earthquake Engineering	PhD	5	
<b>Subtotal</b>			<b>919</b>	
<b>Under-graduate Programme</b>				
Bahir Dar	Disaster Risk Management and Sustainable Development	BSc	150	
UDM	Environmental Engineering and Disaster Management	BSc	170	
<b>Subtotal</b>			<b>320</b>	
<b>Modules</b>				
Moi	Public Health - Nutrition in Emergencies	U'grad	10	
	<b>Environmental Health - Disaster Preparedness</b>	U'grad	<b>44</b>	<b>x</b>
Makerere	Management of Public Health Emergencies	U'grad	40	
	Nutrition in Emergencies	Masters	17	
	Sexual and Reproductive Health in Emergencies - full time	Masters	8	
	Sexual and Reproductive Health in Emergencies - part time	Masters	53	
SU	Disaster Risk Studies and Development	Honours	23	
Tana	Economic valuation tools in Macroeconomics and modelling	U'grad	Numbers not available	
	Economic valuation tools in Public affairs	U'grad		
	Economic valuation tools in General Economics	U'grad		
	Economic valuation tools in Development	U'grad		
UBuea	Natural hazards, disasters and climate change	U'grad	68	
	Global Commons, Natural Disaster and Environmental Risk	Masters	15	
	Groundwater pollution and protection	Masters	22	
	Current Topics in Climate Change, Resilience and Adaptation	PhD	8	
	Current trends in Environmental hazards	PhD		
Ghana	Theories and Analytical Methods for Integrated Disaster Risk	U'grad	9	
	Concepts and Methods in Advanced Integrated Disaster Risk	U'grad	11	
	Policies and Strategies for Integrated Disaster Risk Reduction	U'grad	18	
	Applied Integrated Disaster Risk Reduction (IDRR) in Urban Ghana	U'grad	10	
<b>Subtotal</b>			<b>381</b>	
<b>Total</b>			<b>1 620</b>	

Note \*ARU: 10 registered students withdrew from studies after night-classes were changed to full time day classes.

## Curricula innovation and development

At least six partners reported curriculum review processes to ensure their programmes remained dynamic and relevant, and to achieve more effective alignment with other courses. For instance, Moi University began developing a DRR course component to be integrated into its Community Health Education Programme, while ARU explored the possible integration of disaster risk content within existing undergraduate curricula, including construction, architecture, housing/human settlements development and land management.

Many Periperi U partners innovated by integrating field-work into course curricula, noting that this provided important opportunities for students to ground academic knowledge in practice realities. For instance, in 2017, students enrolled in SU's DRSD honours module undertook field research to better understand risk conditions facing backyard-dwelling residents in the town of Klapmuts.

Similarly, ten UG MPhil students opted for field work with the National Data Centre (NDC) at the Ghana Atomic Energy Commission (GAEC), focusing specifically on "the effectiveness of early warning of seismic vulnerability: assessing the NDC in Ghana". In Cameroon, UBuea also actively promoted field and laboratory work – with an emphasis on volcanic activity, floods, landslides and the impact of climate change on the environment.

### **3.4.3 Short courses**

Despite pronounced funding constraints for much of the reporting year, seven partners implemented short courses that reached 370 people (260 male and 110 female). Of these, 190 (133 male and 57 female) were students at ABU who participated in a local Emergency Preparedness Response (ERP) within the University Campus and immediate surrounding community. This exercise was also used to assess the level of public awareness and emergency preparedness.

Makerere University convened its regular short course on *Public Health in Emergencies*, while SU hosted its *Community Risk Assessment* course and USTHB hosted its established *Introduction to Earthquake Risk Management for Engineers*. The other three courses were customised for specific audiences, with BDU's *School Safety Training* course for school administrators and teachers, ARU's course for Mwanza City Council's technical staff and Tanà's course on *Disaster Risk and Disaster Management: Resilience and Community Management* for representatives of the Tsiafahry rural municipality, including its Mayor.

Several partners also reported preparatory work for future customised courses. These included courses specifically targeting journalists (Tanà), and those for people living with disabilities (UDM). USTHB reported developing a plan for a country-wide training programme with the National Delegation for Major Risks (NDMR) to be conducted during September – November 2017 for all DRR focal points in Algeria's 48 provinces.

### **3.4.4 Risk research**

With *understanding risk* a central priority in the Sendai Framework for Disaster Risk Reduction, along with its emphasis on science and technology, Periperi U staff and post-graduate students contributed substantially to Africa's growing risk knowledge. This resulted in more than 200 student disaster risk-related research projects at Bachelors, PGDip, Honours, Masters and PhD levels across the partnership.

#### **Student placements and internships: 'win-win' opportunities for students and hosting institutions**

Internships also offer valuable opportunities for students to gain practical experience and to secure work after their studies. For example, USAID in Ethiopia funded an internship programme that created the opportunity for 20 B.Sc DRM graduates to intern with government departments.

GBU students also had internship opportunities in state agencies, development agencies and the private sector (including agricultural companies) to conduct thesis research.

Makerere's School of Public Health signed an MoU with different organisations to support students' placements and research. These included the Ugandan Red Cross Society (URCS), Canadian Physicians for Aid and Relief (CAR) and Medical Teams International (MTI).

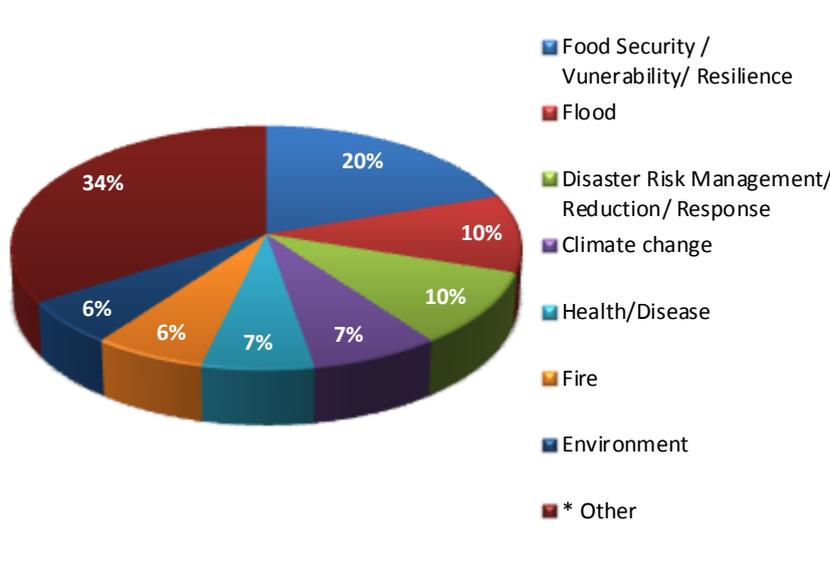
It was also reflected a marked increase in publications across a wide range of disaster risk and development contexts. Contrary to external views of Africa’s risk profile, these research contributions cut across a diverse array of themes, embracing vulnerability and resilience, food security, public health and conflict-related concerns, as well as critical studies on local DRM capacity, preparedness and response.

### Postgraduate research

In 2016-17, 203 students undertook research for BSc, PGDip, Honours, Masters and PhD degrees, including 166 at the Masters level. Impressively, despite resource constraints, 94 theses were completed during the year. These included 85 at Masters level, with 29 and 19 of these attributed to students at ARU and GBU respectively (Table 4).

**Table 4: Summary of postgraduate research projects across Periperi U partners (26 May 2016 - 25 May 2017)**

	Research Projects Ongoing	Theses Completed	Total
ABU	13	-	13
ARU	32	25	57
BDU	-	48	48
GBU	19	1	20
Ghana	6	5	11
Makerere	8	1	9
Moi	-	2	2
SU	-	7	7
Tanà	2	-	2
UBuea	4	-	4
UDM*	25	-	25
USTHB	-	5	5
	<b>109</b>	<b>94</b>	<b>203</b>



**Figure 2: Primary themes in Periperi U-partner student theses (26 May 2016 - 25 May 2017)**

The diversity of student research themes is illustrated in Figure 2. While the most frequently reported student thesis themes related to food security, vulnerability and resilience, ‘floods’ and ‘disaster risk’ were also extensively studied. Interestingly, while many dissertation topics fell within the seven main themes listed above, a third of student research was classified as ‘other’. Within this classification, BDU

offers an excellent example of students who increasingly embrace complex research topics, including; challenges faced by the Ethiopian Insurance Industry in managing and insuring catastrophic risks, an exploration of gender inequality in land rights in the Harshin Woreda, and agricultural monitoring using remote sensing and GIS. Other examples of thesis topics are included in the table below.

**Table 5: Illustrative examples of research undertaken by postgraduate students (26 May 2016 - 25 May 2017)**

Univ.	Student Research Topics
ABU	Assessment of Distribution of Relief Materials To the Victims of Insurgency In NYSC/IDP Camp Damare, Adamawa State
BDU	The impact of climate change and variability's on small holder farmers;
GBU	Analyse quantitative du risque d'introduction de <i>Bactrocera dorsalis</i> dans l'union européenne à travers les exportations de mangue au Sénégal
Makerere	Food security and coping strategies among refugees in Adjumani, Uganda
UBuea	Assessing Water Security In The Abiergueu And Ekozoa Sub River Basin Of The Mfoundi, Yaoundé
USTHB	Evaluation de la vulnérabilité du patrimoine ancien des bâtiments de la ville d'Alger

### Staff research collaborations

One defining aspect of the consortium's research engagement during 2016-17 was the emergence of new and innovative Periperi U faculty-led research collaborations with government, nongovernmental organisations, international research groupings and international agencies. This signalled growing confidence in the capacity of Africa-based researchers and scientists in the disaster risk domain – both within and outside the continent. The box below provides a snapshot of this rapidly growing capability.

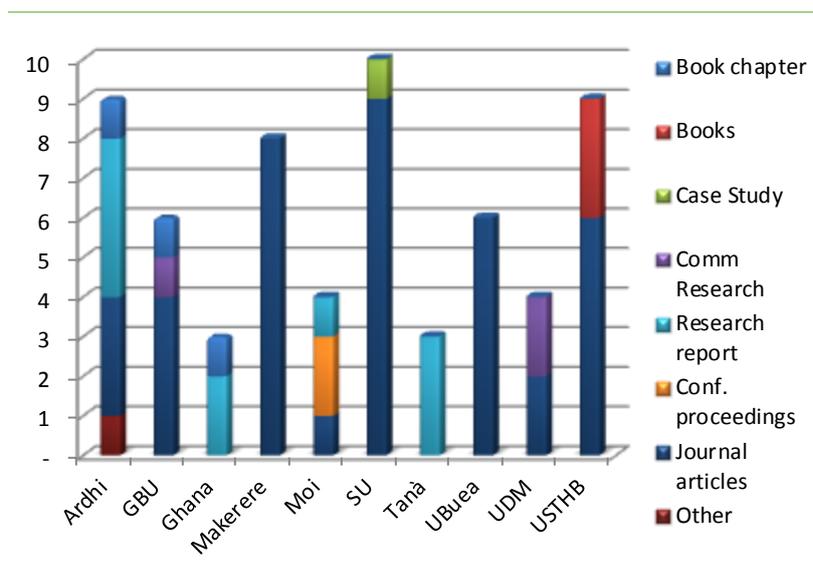
Univ.	Description of research collaboration
Tana (CERED), CARE Int.	In collaboration with <b>CARE</b> , Tana undertook a study describing the flood risk in Antananarivo. This resulted in the Inundation Early Warning System to improve decision making at all levels. It has already been used by national authorities to better manage flooding linked to Tropical Cyclone Enawo.
RADAR/SU WCDMC, Private sector	With <b>provincial government and a private insurer</b> , SU began to research the effectiveness of smoke alarm detectors in the Wallacedene Informal Settlement, to reduce the impacts of repeated household fires.
UBuea, ICSU	With support from ICSU's 'LIRA' initiative ( <b>Leading Integrated Research for Agenda 2030 in Africa</b> ) UBuea began conducting research on <i>assessing &amp; characterising volcanic and flood hazards and their health implications in the cities of Goma (DR Congo), Buea and Limbe (Cameroon)</i> .
Fathum RADAR/SU, UDM, Makerere Univs of Reading & Oxford, ODI, IFRC, WFP, PHE	<b>RADAR/SU, UDM and Makerere University</b> became involved in <b>Forecasts for Anticipatory Humanitarian Action</b> – collaborative research to improve forecast accuracy for more effective/ appropriate Pre-disaster response & strengthened forecasting & early warning systems in Teso Uganda, Chibuto Mozambique and the Langeberg, South Africa).
ARU, UCL Centre for Community Initiatives (local NGO), technical team from Temeke Municipal Council	<b>ARU</b> began a research collaboration to collect information on how low income / vulnerable people's experience environmental risks in urban areas – to generate practical metrics to be <u>used</u> at local levels, and integrated into existing urban resilience.  <a href="https://www.ucl.ac.uk/bartlett/development/research/risk-in-informal-settlements">https://www.ucl.ac.uk/bartlett/development/research/risk-in-informal-settlements</a>

### **Box 1: Examples of emergent disaster research collaborations involving Periperi U partners**

#### Publications

The combined effect of increasing Periperi U post-graduate and staff research capacity resulted in a marked expansion of publications. During 2016-17, consortium partners produced 62 publications, including three book chapters, three books, two conference proceedings, ten research reports and 39

peer-reviewed journal articles (Figure 3 below). This represented an impressive increase compared with outputs in earlier years, illustrated by only 20 publications in 2014 and 2015 respectively. Table 6 provides a short, illustrative list of articles, reports and other outputs produced by Periperi U partners in 2016-17.



**Figure 3: Types of publications produced by Periperi U partners (26 May 2016 - 25 May 2017)**

**Table 6: Illustrative list of publications (26 May 2016 - 25 May 2017)**

Univ.	Output type	Research author/s	Research title
Ghana	Book Chapter	Ersing, R., Ayivor J.S., Alhassan, O, and Caruson, K.	'Ecological Social Work in a Developing Nation: Africa' <sup>11</sup>
SU	Case Study	Holloway, H., Fortune, G., and Pharoah, R.	'Why this storm...this flood...this hospital?' <sup>12</sup>
UDM	Commissioned research	Da Maia, R. C., Luís, H., Chuquela, G., Amide, U., Mosquito, D., Macaringue, D., Almeida, I., Nhambiu, B.	Evaluation of Possibilities of Using Forecast Based Financing for Droughts Early Action and Preparedness in Chibuto Mozambique <sup>13</sup>
ARU	Peer-reviewed journal articles	Kihila, J.	Fire Disaster Preparedness and Situation Analysis in Higher Learning Institutions of Tanzania <sup>14</sup>
Tana	Research report	DMGRC-CERED/Periperi U team members	Système d'Alerte Prompt/ Communautaire (SAP/C)

### 3.4.5 Community outreach

Given the difficult funding conditions for most of the year, almost all partners opted to defer their planned outreach activities to 2017-2018. However, where possible, partners inventively incorporated outreach aspects with other interventions. Table 7 below provides examples of these integrative strategies for reaching out – especially to highly vulnerable communities.

<sup>11</sup> in McKinnon, J. & Alston, M. (Eds), *Ecological Social Work: Towards Sustainability*. Palgrave Macmillan, United Kingdom, pp. 125-140 <https://he.palgrave.com/page/detail/Ecological-Social-Work/?K=9781137401359>

<sup>12</sup> in Wymann von Dach, S., Bachmann, F., Alcántara-Ayala, I., Fuchs, S., Keiler, M., Mishra, A., Sötz, E., (Eds), *Safer lives and livelihoods in mountains: Making the Sendai Framework for Disaster Risk Reduction work for sustainable mountain development*. Bern: Centre for Development and Environment (CDE), University of Bern, Bern Open Publishing (BOP), pp58 [http://www.cde.unibe.ch/research/projects/mountain\\_agenda/safer\\_lives\\_and\\_livelihoods\\_in\\_mountains/index\\_eng.html](http://www.cde.unibe.ch/research/projects/mountain_agenda/safer_lives_and_livelihoods_in_mountains/index_eng.html)

<sup>13</sup> Red Crescent Climate Centre, 45 pp.

<sup>14</sup> In *Jàmà: Journal of Disaster Risk Studies* 9(1), a311. <https://doi.org/10.4102/jamba.v9i1.311>.

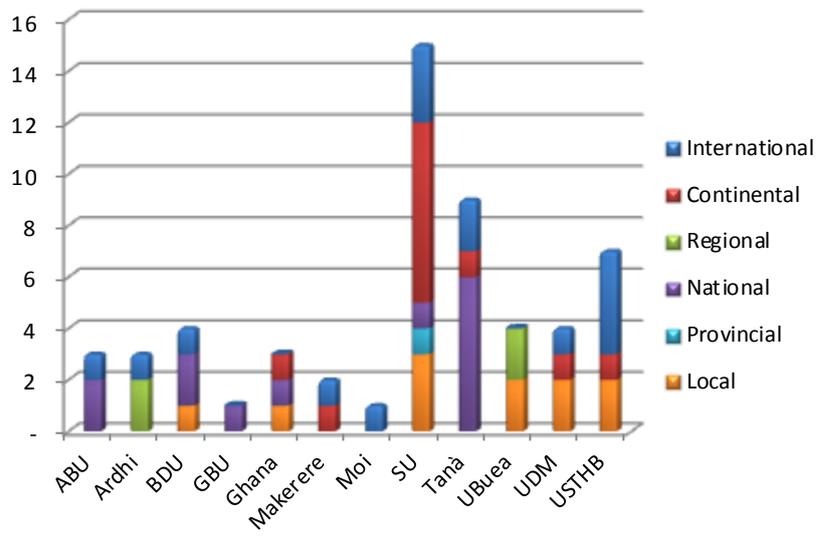
**Table 7: Examples of strategies applied to achieve community outreach activities by Periperi U partners (26 May 2016 - 25 May 2017)**

Optimising student service learning and research	
<b>ARU</b>	Implementation of a participatory community risk and vulnerability assessment in Temeke Municipality.
<b>Makerere</b>	Makerere used planned field visit by public health students to refugee settlements in Adjumani District, Uganda to conduct rapid assessments on status of the organisation and service delivery in the refugee settlements visited.
<b>UBuea</b>	UBuea's studies on water quality and reducing flood hazards in Limbe City not only strengthened post-graduate student capabilities, but also benefitted the local authorities.
Optimising collaboration with government institutions	
<b>Tana</b>	During 2016, Tana was invited both as an observer and recorder of 'lessons learned' at inundation simulation exercises by the National Bureau of Disaster and Risk Management .
<b>SU</b>	The Western Cape Disaster Management Centre invited RADAR/SU to conduct community-based research related to smoke detector installation and monitoring in a high-risk informal settlement in Cape Town.
Optimising academic programmes or short courses for outreach benefits	
<b>BDU</b>	BDU conducted a DRR short course for teachers and school administrators.
<b>Moi</b>	COBES 2 and 5 enabled Moi University to adopt a community approach to teaching vulnerable people in at-risk settlements how to reduce risks at community level, including reducing exposure to hazards.

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

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. At local, and (sub)national levels, strategic engagement is particularly crucial to ensure the co-design of formal and non-formal capacity-building programmes and disaster risk research so these are 'fit for purpose' in specific risk contexts. At national, regional, continental and international levels, these engagements also provide consortium members the opportunity to promote the role of higher education institutions as key partners in disaster risk-related capacity building and research.

During 2016/2017, partners reported 41 local, national, regional and continental engagements, as well as a further 15 international engagements. These included the finalisation of MoUs with government departments for DRM-capacity building as well as presentations at meetings, workshops and conferences. Figure 4 represents the number and scale of engagements undertaken by partners in the past year. It suggests that most partners engage in activities across multiple scales. This allows them to carry the knowledge gained in one level, (eg from community based vulnerability assessments) to other levels, such as national strategic meetings. It also enables consortium members to create and strengthen links between different stake-holder groups, thus increasing efficiency and impact. By applying this model, Periperi U members become particularly important resources for their partners, especially their national and local governments.



**Figure 4: Number and type of strategic engagements undertaken by Periperi U partners (26 May 2016 - 25 May 2017)**

Table 8 illustrates the consortium’s vibrant and multi-scalar reach through a diversity of partner interactions and deliberate “local to global” engagements. These underscore the partnership’s agility and capacity to connect with and inform diverse, seemingly unrelated and disparate stake-holder groups.

**Table 8: Illustrative list of strategic engagements by Periperi U partners (26 May 2016 - 25 May 2017)**

Local engagement	
<b>UBuea</b>	Collaboration with stakeholders on strategies to reducing flood hazards in the <b>Limbe City Council</b> area, Cameroon.
<b>UDM</b>	Consultations with Catholic University of Mozambique (in Beira) towards launching an MSc Course on Risk Management and Short Courses in the <b>Central Region of Mozambique</b> .
Sub-national engagement	
<b>SU</b>	Presentation at <b>Coastal Provincial Disaster Management Centres Summit</b> : on 1 December, 2016 <i>"High Impact Weather and Flood Impact Disasters in the Western Cape, South Africa: Insights and Implications"</i>
National engagement	
<b>ABU</b>	Presentation at the <b>National Platform on Disaster Risk Reduction</b> , Abuja, Nigeria on February 21-22, <i>"Outcomes from the Regional Platform held in Mauritius."</i>
<b>Tana</b>	Signature of collaboration with the <b>National Bureau of DRM (BNGRC)</b> on 25 October 2016 to strengthen cooperation between the parties and to more efficiently support the implementation of the DRM national strategy.
(sub)Regional engagement	
<b>ARU</b>	Presentation at the <b>East African Community (EAC) Sub-Regional Platform on DRR</b> on 3 June 2017: <i>"Higher Education engagement in Advancing DRR in the EAC"</i>
Continental engagement	
<b>SU</b>	Presentation at <b>NEPAD-convended session</b> on Agricultural Risk Management on 5 September 2016 at African Green Revolution Forum, Nairobi Kenya. <i>"Transforming Human Capital to better Manage Africa's Disaster Risks: the experience of Periperi U"</i>
International engagement	
<b>BDU</b>	Presentation at a consultative workshop on Integrated disaster risk management, convended by <b>Netherlands Red Cross</b> in January 2017: <i>"The Role of Education in Integrated Disaster Risk Management, African Experience: The Periperi U Consortium"</i>
<b>USTHB</b>	Presentation at <b>5th International Conference on Forensic Research &amp; Technology</b> on 31 October – 2 November, 2016 (San Francisco, California, USA). <i>"Researching Engineering Causes in 2003 Boumerdes-Algiers (Algeria) Earthquake Disaster"</i>

## 4 Secretariat Report

### 4.1 Overview of secretariat support

Although the 2016-17 reporting period was characterised by numerous challenges for the Periperi U secretariat, the RADAR/SU team continued to provide ongoing services to the consortium. This included operational support for core Periperi U activities, as well as the facilitation of strategic international engagements and ongoing website/e-library development.

### 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 well as enablement of the partnership's attendance at the 6<sup>th</sup> African Regional Platform on DRR in Mauritius and at the Global Platform in Cancun, Mexico. From July 2016, the secretariat's capacity to manage rapidly expanding demands was enabled by the appointment of a skilled programme coordinator. This redistributed the secretariat's workload, and particularly improved performance monitoring and partner support.

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. Specifically, from November 2016 – April 2017, the secretariat ensured that implementing agreements for all eleven sub-awardees were signed, along with certifications required by Stellenbosch University's *Anti-Trafficking Compliance Plan for USAID-Funded Activities Implemented through the Periperi U Programme*. It also oversaw the production of first-year work-plans by all sub-awardees, including their proposed budgets and activities.

In addition, from October 2016 to May 2017, the secretariat prepared and submitted advance requests to USAID/OFDA that resulted in the disbursement of USD 629 892 to 11 sub-awardees. In March 2017, it initiated preparatory arrangements for a planned meeting of partner finance/administrative staff at Stellenbosch University for the purposes of streamlining financial management processes. Altogether, during the reporting period, RADAR/SU reserved and paid for 27 international flights for partner travel.

### 4.3 Facilitation of strategic international engagement and cooperation

During 2016-2017, SU/RADAR facilitated partner attendance at the 6<sup>th</sup> Africa Regional Platform on DRR. This not only included supported travel and logistics arrangements for 14 travellers, but also the submission of concept notes for both pre- and side-events and their eventual organisation in Mauritius. Secretariat support also extended to Periperi U participation in both a panel presentation and the PoA drafting committee, as well as staffing an exhibition stand in collaboration with the International Council of Science Regional Office for Africa. Similarly, the secretariat ensured the successful participation of three Periperi U attendees at the May 2017 Global Platform for Disaster Risk Reduction in Cancun, Mexico.

With several important events and processes to be implemented by 2018, the secretariat held preliminary discussions on Periperi U's 2017 consultative meeting planned for October 2017 at BDU. It also began a conversation with both ARU and the Stellenbosch University's African Doctoral Academy on introducing the planned Periperi U affiliate programme and convening the Periperi U summer/winter school in Tanzania, provisionally planned for early 2018.

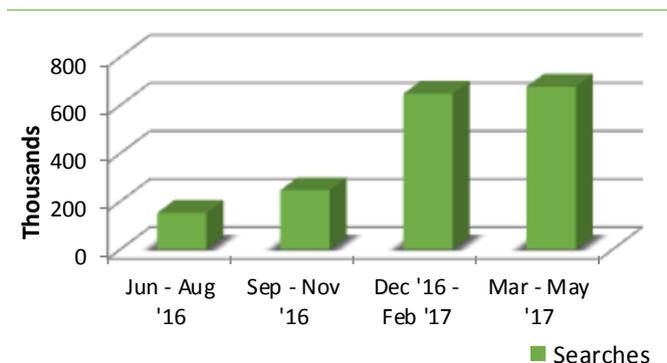
### 4.4 Riskreductionafrica.org and online research centre (ORC)

In 2016-17, SU/RADAR continued to improve Periperi U's online presence. This included updating the partnership's website for greater accessibility ([www.riskreductionafrica.org](http://www.riskreductionafrica.org)). It was also reflected in the continued expansion of the partnership's online research centre ([www.lib.riskreductionafrica.org](http://www.lib.riskreductionafrica.org)).

Table 9 and Figure 5 indicate ORC’s increasing profile, in which 1 723 251 searches were performed and 166 287 PDFs were viewed. The monitoring data show spikes in searches performed during December 2016 and May 2017, broadly coinciding with Periperi U’s participation attendance at the AfrP and the Global Platform for Disaster Risk Reduction (as well as possible examination schedules for some universities).

**Table 9: Number of searches conducted on ORC and number of PDFs viewed (June 2016-May 2017)**

Month	Searches	PDFs viewed
Jun - Aug '16	152 138	46 376
Sep - Nov '16	246 348	32 022
Dec '16 - Feb '17	647 813	38 219
Mar - May '17	676 992	49 670
<b>Total</b>	<b>1 723 291</b>	<b>166 287</b>



**Figure 5: Graph indicating number of searches conducted on Periperi U’s ORC (26 May 2016 - 25 May 2017)**

With ORC’s increasing visibility, the Secretariat anticipates that its role may expand further in response to requests to upload disaster research from across Africa. For instance, in 2017, the Federal University of Technology (FUT) in Minna, Nigeria approached the Secretariat to upload its students’ theses. In anticipation of similar requests and given the already large volume of theses produced by the Periperi U consortium, the Secretariat is updating its systems to regularise more thesis uploads.

## 5 Programmatic Constraints

During 2016-17, the most pervasive obstacle to implementation was the absence of operational funding - given that advance requests could only be initiated towards the end of 2016. As most partners only received funds in January 2017 (12-15 months after sub-awardee funding concluded for the previous grant), project implementation was constrained for much of 2016. This curtailed project activities outside of the core academic programmes, including the hosting of short courses; organising and attending local and international workshops and conferences; hiring additional academic staff; purchasing teaching aids, and paying costs such as travel for field research.

As underlined in previous reports, a major – and persisting obstacle - was the lack of student funding. This represented a major impediment to students who sought to pursue university-based studies (but could not afford the costs) as well as those registered students who could not complete their studies timeously due to limited research funding. Throughout the year, consortium members also underlined the negative effects of delayed payments or insufficient funds on the production of disaster risk research by both staff and students. Similarly, they expressed concern at the limited opportunities for internships that would enable career pathing for newly qualified graduates.

The absence of skilled human resources within the consortium represented a second important obstacle. This reflects an increasing demand for additional academic staff to cater for growing disaster risk-related academic programmes as well as the challenges associated with sourcing and retaining an adequate pool of external examiners for post-graduate dissertations and theses.

On-campus disruptions also constituted a recurrent obstacle for at least five partners during 2016-17. These disruptions (including protests by both lecturers and students) interrupted teaching and in some instances, even the temporary closure of the universities concerned. UBUEA in Cameroon reported extremely trying circumstances as political unrest that began in November 2016, continued into 2017.

## 6 Conclusion

Despite challenges experienced and tight financial environment, Periperi U made considerable progress during 2016-2017. This was particularly evident from the marked increase in student numbers. While the original proposal anticipated a three-year target of 5 784 students in disaster risk-related programmes and modules, in 2016-17 alone, the partnership reached 1 620 students. Although there were set-backs to community outreach and short-course participation, consortium members substantially expanded their capability for integrated disaster risk research and capacity for strategic engagement.

The Periperi U model of purposefully mobilising higher education to advance disaster risk reduction continues to underscore the benefits of integrating new teaching, learning and research within existing university programmes and structures. This is especially the case in sub-Saharan Africa, where there are pressing needs for skilled human capital. Going forward, the partnership will place heightened emphasis on diversified funding mechanisms for student internships, so that future graduates can anticipate work prospects that are personally fulfilling, as well as benefit the communities in which they work.

## APPENDICES

### 1. USAID Award Indicators

Indicator	Award Description	Achieved 2016/2017	Comment
Number of People Targeted	<b>(14 038)</b>	<b>1 990</b>	This includes - number of students - attendees at short courses
<b>Global Advocacy and Engagement in Disaster Risk Reduction (focus on higher education)</b>			
Indicator 1:	<b>Number of jointly organised events:</b> 1 x dedicated session at Global Platform 2017  1 x dedicated session in Africa Regional Platform 2016	-  <b>2</b>	<b>A Science and Technology pre-event (22 November, 2016):</b> <i>Maximising our momentum: Science, technology and academic partnerships for disaster risk reduction in Africa.</i> <b>A side-event (22 November, 2016):</b> <i>Strengthening Science, Technology and Academic Engagement in Implementing the Yaoundé Framework in Africa: Issues, Challenges and Opportunities.</i>
Indicator 2:	<b>Number of attendees at jointly organised events:</b> (Global Platform) <b>150</b> (Africa Regional Platform) <b>100</b>	<b>71</b>	
Indicator 3:	<b>Number of joint publications:</b> 1 x UNESCO global review on HEIs and DRR 1 x UNISDR global publication on HEIs and DRR	- -	
Indicator 4:	<b>Number of documents, plans or agreements modified to include DRR language:</b> ≥ 1 DRR scholarship call/grant announcement globally/regionally ≥ 1 (sub)regional HEI policy documents incorporating DRR	<b>1</b> -	LIRA 2030: <i>Understanding the «Energy-Health-Natural Disasters» nexus in urban contexts in Africa</i>
<b>Integration/Enhancement of DRR within Education and Research Programs</b>			
Indicator 1:	<b>No. of DRR curricula developed higher education institutions</b> 14 new programmes + 20 new modules = <b>34 curricula</b>	<b>6</b>	5 new programmes + 1 new module = 6
Indicator 2:	<b>Number of students educated on DRR, disaggregated by sex</b>		

	2 014 (progs) + 3 770 (modules) = <b>5 784 students</b>	<b>1620</b>	1 239 (progs) + 381 (modules) = 1620
Indicator 3:	<b>Number of DRR-related programmes established within educational institutions</b> 14 new academic programmes	<b>5</b>	
<b>Non-USAID Custom Indicators</b>			
Indicator 4:	<b>Number of non-formal DRR-related courses conducted</b> 134 short courses	<b>7</b>	
Indicator 5:	<b>Number of participants attending non-formal DRR-related courses, disaggregated by sex</b> 3 439 participants (≥40% women)	<b>370</b>	
Indicator 6:	<b>Number of DRR-related community outreach events</b> 176 community outreach events	-	
Indicator 7:	<b>Number of participants attending DRR-related community outreach events, disaggregated by sex</b> 4 565 participants (≥40% women)	-	

## 2. Short courses implemented 2016/2017

Univ.	Course Title	Male	Female	Total
<b>ABU</b>	Emergency Preparedness Response	133	57	190
<b>ARU</b>	Understanding Disaster and Role of the Mwanza City Council in DRR	32	11	<b>43</b>
<b>BDU</b>	School safety training	39	6	<b>45</b>
<b>Makerere</b>	Public Health in Complex Emergencies	5	7	<b>12</b>
<b>SU</b>	Community Risk Assessment	1	4	<b>5</b>
<b>Tanà</b>	Disaster Risk and Disaster Management, Resilience and Community Development	15	10	<b>25</b>
<b>USTHB</b>	Introduction to Earthquake Risk Management to Engineers	35	15	<b>50</b>
<b>Total</b>		<b>260</b>	<b>110</b>	<b>370</b>