



PERIPERI U

Partners Enhancing Resilience for People Exposed to Risk

ANNUAL REPORT

FOR THE PERIOD 01/10/14 - 30/09/15



USAID
FROM THE AMERICAN PEOPLE



IRDR ICoE

Integrated Research on Disaster Risk
International Centre of Excellence

Report based on the

REGIONAL DISASTER RISK AND VULNERABILITY REDUCTION CAPACITY DEVELOPMENT PROJECT
(PERIPERI U)

DiMP/RADAR
Stellenbosch University
ANNUAL REPORT FOR THE PERIOD
1 OCTOBER 2014 TO 30 SEPTEMBER 2015

Funded through Agreement No.:
USAID AID-OFDA-G-II-00215

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

For more information, contact:
Gillian Fortune (gillianfortune@sun.ac.za)

TABLE OF CONTENTS

Tables and figures	iii
Abbreviations & Acronyms	iv
Executive Summary	vi
1. Overview of Progress	1
2. Progress in Focus Areas	1
2.1 Institutional embedding of active disaster risk-related teaching and training, research and policy advocacy capacity with particular emphasis on urban and hydro-meteorological risks	2
2.1.1 Growing institutional support at senior management levels	2
2.1.2 The importance of institutional embedding – growing staff numbers	3
2.2 The enhancement of sustainable capacity for each university unit/programme to provide at least one-two short disaster risk-related courses annually and to design/implement one new course by 2014.	4
2.3 The growth and sustainability of new undergraduate and/or graduate programmes related to reducing/managing the risk and vulnerability profile of the country concerned.	5
2.3.1 Overview	5
2.3.2 Current activities	6
2.3.3 Innovations to improve access and future directions	7
2.4 The generation and communication of applied research outputs by each unit/programme related to the risks and vulnerabilities of the country concerned that increase local understanding and improve the management of those risks.	8
2.4.1 Growing faculty and commissioned research	8
2.4.2 Post-graduate student disaster risk research	8
2.5 Mobilisation of the consortium to advance disaster-risk reduction efforts through the strategic engagement by each unit/program institutionally, as well as at national/sub-national, continental and international scales with governmental, nongovernmental, international and scientific stake-holders.	9
2.5.1 Overview	9
2.5.2 Strategic engagement at local/national levels, as well as continental and global scales	10
3. Periperi U independent evaluation	13
4. SU/RADAR Secretariat Support to Periperi U	13
4.1 Overview	13
4.2 Operational support for core Periperi U activities	13
4.2.1 Support for day-to-day Periperi U activities	14

4.2.2	Periperi U annual consultative meeting (Dar es Salaam, 11-12 October)	14
4.2.3	Support for summative evaluation	14
4.2.4	Potential Consortium expansion	14
4.3	Facilitation of strategic international engagement and cooperation	14
4.3.1	Preparations for the WCDRR in Sendai and AWGDRR in Yaoundé	14
4.3.2	Forthcoming consultations and events	15
4.4	Website capability and e-library capability in 2015/16	15
5.	Programmatic Constraints	16
6.	Conclusion	16
	Appendices	17
Appendix A1	Periperi U short courses run and attendance 1 October 2014 to 30 September 2015	17
Appendix A2	Academic programmes 1 October 2014 to 30 September 2015	19
Appendix A3	Applied disaster risk research 1 October 2014 to 30 September 2015	22
Appendix A4	Student thesis topics 1 October 2014 to 30 September 2015	27

TABLES AND FIGURES

Tables

Table 1	Summary of Periperi U Training/Education Achievements for October 2014 – 2015	vii
Table 2.1.1	Throughput of BSc and MSc students at Bahir Dar University and employment status	2
Table 2.1.2	Distribution of staff positions in Periperi U by gender	3
Table 2.3.2.1	Periperi U Academic Programmes 2014 and 2015	6
Table 2.3.2.2	Numbers of Periperi U Students and Programmes Oct 2014-Sept 2015	7
Table 2.4.1	Examples of Periperi U faculty research undertaken 2014-15	8
Table 2.4.2	Illustrative examples of masters and PhD research undertaken 2014-15	9
Table 2.5.2.1	Examples of Periperi U strategic engagement at local/national levels 2014-15	10
Table 2.5.2.2	Examples of Periperi U strategic engagement at regional/continental scales	11
Table 2.5.2.3	Examples of Periperi U strategic engagement at global scale	11

Figures

Figure 2.1.2	Periperi U Teaching, Research and Support Staff 2014/15	4
Figure 2.2	Short course held at GBU focused on Food and Health Risks as related to Flooding	4
Figure 2.3.1	Students enrolled in BDU's BSc in Disaster Risk Management & Sustainable Development	5
Figure 2.5.1	Strategic engagements by partner and scale 2014-15	10

Figure 2.5.2.3.1	Prof Benouar delivering a short presentation at the WCDRR Ingite Stage on Periperi U	12
Figure 2.5.2.3.1	Periperi U's co-hosting a side-event on the <i>Role of Higher Education Institutions (HEIs) in Advancing Disaster Risk Reduction</i>	12
Figure 4.4	Screenshot of Periperi U's official website www.riskreductionafrica.org	15

ABBREVIATIONS & ACRONYMS

ABU	Ahmadu Bello University
ACDS	African Centre for Disaster Studies
AfRP	African Regional Platform
ANIE	African Network for the Internationalisation of Education
ARAM	Agricultural Risk Assessment and Management
ARU	Ardhi University
ASSA	Academy of Science of South Africa
AU	African Union
AUEDM	Asian University Network on the Environment and Disaster Management
AWGDRR	African Working Group on Disaster Risk Reduction
BDU	Bahir Dar University
CCA	Climate Change Adaptation
CEGI	Canadian Centre for International Cooperation
CERED	Centre D'Etudes et de Recherches Economiques pour le Developpement
CoE	Centre of Excellence
CRSCAD	Centre for Rebuilding Sustainable Communities after Disasters
DiMP	Disaster Mitigation for Sustainable Livelihoods Programme
DiMSUR	Disaster Risk Management, Sustainability and Urban Resilience
DiPECHO	DG ECHO Disaster Preparedness Program
DM	Disaster Management
DMGRC	Multidisciplinary Disaster and Risk Management Masters Programme
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
EAC	East African Community
ECOWAS	Economic Community of West African States
FEMA	Federal Emergency Management Agency
GAAS	Ghana Academy of Arts and Sciences
GAR	Global Assessment of Risk
GAMA	Greater Accra Metropolitan Area
GBU	Gaston Berger University
GFDRR	Global Facility for Disaster Risk Reduction
HEI	Higher Education Institution
HFA	Hyogo Framework for Action
HIV	Human Immunodeficiency Virus
ICoE	International Centre of Excellence
ICSU	International Council for Science
IGAD	Intergovernmental Authority on Development

INGC	National Institute for Disaster Management
IRDR (SC)	Integrated Research on Disaster Risk (Scientific Committee)
IFRC	International Federation of Red Cross and Red Crescent
KAIPTC	Kofi Annan International Peacekeeping Training Centre
MDG	Millennium Development Goals
MoU	Memorandum of Understanding
MSc	Master of Science
MUSPH	Makerere University's School of Public Health
NADMO	National Disaster Management Organisation
NEMA	Nigeria Emergency Management Agency
NEPAD	New Partnership for Africa Development
NETC	National Emergency Training Center
NGO	Non-governmental Organisation
NOG	National Operating Guidelines
ODI	Overseas Development Institute
OFDA	Office of Foreign Disaster Assistance
OXFAM	Oxford Committee for Famine Relief
PERIPERI U	Partners Enhancing Resilience of People Exposed to Risks (Universities)
PhD	Doctor of Philosophy
RADAR	Research Alliance for Disaster and Risk Reduction (formerly known as DiMP)
REaL	Risk Education and Learning
RIASCO	Regional Inter-Agency Standing Committee
SASDiR	Southern Africa Society for Disaster Reduction
SHEAR	Science for Humanitarian Emergencies and Resilience
STAC	Scientific, Technical and Academic Communities
SU	Stellenbosch University
SUN	Scaling Up Nutrition
TANÀ	University of Antananarivo
UDM	Technical University of Mozambique
UG	University of Ghana
UGB	Université Gaston Berger
UN	United Nations
UNAM	University of Namibia
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNISDR	United Nations Office for Disaster Risk Reduction
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
USAID	United Agency for International Development
USTHB	University of Science and Technology Houari Boumediene
USF	University of South Florida
WADPI	West Africa Disaster Preparedness Initiative
WCDRR	World Conference on Disaster Risk Reduction
WFP	World Food Programme

EXECUTIVE SUMMARY

In 2015, 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 eleven 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)

Beginning with an initial one-year grant in 2006 to test 'proof of concept', the partnership has evolved from a focus primarily at individual university level to a multi-scalar initiative that informs global and continental disaster risk reduction policy. During 2014-15, the consortium's widening reach became apparent through its participation in the World Conference on Disaster Risk Reduction (WCDRR) in its capacity as an IRDR International Centre of Excellence for Risk Education and Learning (ICoE REaL). This engagement both underlined and reinforced almost a decade of Periperi U's focused effort in advancing disaster risk scholarship in Africa at local, national and continental scales.

The partnership's accomplishments this year continue to illustrate its growing profile internationally and continentally. This was reflected in Periperi U's co-convening (with Kyoto University) a side-event **at the WCDRR on the Role of Higher Education in Advancing Disaster Risk Reduction**. It was further indicated by IRDR's request to convene its **14th Scientific and Technical Committee** meeting in Stellenbosch (November 2015) and the partnership's involvement in the preparations for **UNISDR's Science and Technology Conference** in January 2016.

At continental scale, Periperi U continued to represent academia on the **African Working Group for Disaster Risk Reduction (AWGDRR)**. This was reflected in the consortium's participation in the 7th AWGDRR's crucial consultation with African decision-makers in Yaoundé, Cameroon in July 2015. The engagement informed the subsequent High Level Meeting on Disaster Risk Reduction, resulting in the Yaoundé Declaration.¹

These interventions at continental and global levels were matched by increasing action by universities across the consortium, with the involvement of **170 permanent and adjunct staff** in teaching, research and student supervision. At Bahir Dar University (Ethiopia), recognition of the scholarly status of the disaster risk domain was materially reflected in the establishment of the continent's first Institute of Disaster Risk Management and Food Security Studies.

With respect to **short course delivery** during 2014/15, nine Periperi U partners offered 20 short professional courses that reached **688 participants** (see Table A1). This was up by 26% on the 547 who attended courses in 2013/14, with participation of 320 women (47%). Courses offered also reflected both diversity of topic and target group. For instance, more than 200 attendees from three different local authorities participated in courses offered by Ardhi University (Tanzania). Similarly,

¹ <https://www.unisdr.org/archive/45209>

the Technical University of Mozambique reached 160 participants with a course focused on risk management for the energy sector, while 61 attendees the University of Ghana participated in courses on environmental health management and DRR and community resilience building in urban Ghana.

The consolidation and expansion **of existing graduate and post-graduate programmes** has continued. Across the consortium there are now twelve undergraduate/post-graduate programmes and nine disaster risk-related modules incorporated within other existing academic programmes. In 2014-15, 597 new students registered for disaster risk bachelors' and masters' programmes or modules, with 346 continuing studies, and 130 graduating. Altogether, **1,073 students were enrolled**, including 426 undergraduate and masters students at Tanà who completed disaster risk-related modules in non- disaster risk-related academic programmes. Following a lengthy preparatory phase, Gaston Berger University's MSc in the Prevention and Management of Food Insecurity Risks was launched in early 2015, with 34 students, including eight women.

Building on its maturing post-graduate programmes and institutional capacities, the partnership substantially stepped up its **generation and communication of applied disaster risk research** during the past year. This was materially reflected in 25 faculty-initiated or commissioned research projects, 17 journal articles published or in-press and five published book chapters. These projects and outputs reflected wide-ranging topics, including urban risk, food insecurity, public health, and studies of hydrometeorological hazards. The advancement of African disaster risk science capability has been further enhanced by an increasing enrolment of PhD students, with 25 registered for disaster risk-related doctorates.

Periperi U's **strategic mobilisation** component continued to gather momentum in 2014/15. This element was intentionally incorporated into the partnership's model to enable a tighter interface between consortium members, policy makers and practitioners. The approach sought to enable appropriately skilled human capital, while, simultaneously at continental and global scales, it advanced the role of (especially southern) higher education institutions as key partners in disaster risk-related capacity building and research.

During 2014/5, the benefits of purposeful mobilisation were demonstrated quantitatively by 65 partner engagements at local, national, regional and continental levels, along with partner mobilisation at a further 18 international events. These included the WCDRR in Japan, the World Congress on Disaster and Emergency Medicine in Cape Town and United Nations negotiations on the post-2015 Sustainable Development Agenda in New York.

Such intense but disparate demands from both within and outside the partnership placed substantial pressure on the **SU/RADAR secretariat**, reflected administratively and logistically. From October 2014-September 2015, SU disbursed USD 1,160,950 to its partners, up by 40% on the previous year's USD 836,000. It also reserved and ticketed 43 international flights for meetings, conferences and exchange visits (including the October 2015 Periperi U consultative meeting in Dar es Salaam).

Through its coordinating role, the secretariat maintained close contact with UNISDR at regional and global levels, along with ICSU in Paris and the IRDR in Beijing. And, in its project management capacity, the secretariat also ensured that the requisite arrangements for completion of the summative evaluation were provided (including the contractual agreements for eight national consultants in addition to the independent evaluation team).

Despite the challenges associated with a rapidly developing, multi-scalar initiative, Periperi U has maintained and extended its capacity. While the original proposal anticipated a four-year target of 2,000 direct beneficiaries, in 2014/15 alone, the partnership reached more than 1,700 students and short course participants. This total does not include government and other stake-holders that partners engaged in local and national consultations or decision-makers at regional and continental scales.

Through its contribution towards better qualified disaster risk management staff, as well as cross-disciplinary disaster risk research, the Periperi U model of collaborative disaster risk scholarship reaffirms the value of investing in higher education to advance disaster risk reduction capacity. This approach is particularly applicable for nuanced responses to diverse local risk conditions, yet is sufficiently agile to scale-up sustainably.

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. It also underlines the potential for sustainable capacity building in this field that is possible when African institutions of higher learning are materially and collegially supported.

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

Table 1: Summary of Periperi U Training/Education Outputs (October 2014-September 2015)

Institution	Short courses	People trained	Academic progs/modules	Students registered 2014/15
ABU**	-	-	2	109
Tanà ***	4	93	3	457
Ardhi	5	181	2	26
BDU	2	40	2	277
RADAR/SU***	1	11	2	24
GBU	1	22	1	34
UG*	1	61	4*	42
Makerere	1	8	1	12
Moi*	-	-	2*	8
UDM	1	160	2	70
USTHB	4	112		14
TOTAL	20	668	21	1,073

* Modules, not full programmes.

** 109 total include 26 pgrad diploma students

***includes masters prog. and modules

1. Overview of Progress

In 2015, 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

Beginning with an initial one-year grant in 2006 to test ‘proof of concept’, the partnership has evolved from a focus primarily at individual university level to a multi-scalar initiative that informs global and continental disaster risk reduction policy. During 2014-15, the consortium’s widening reach became apparent through its participation in the World Conference on Disaster Risk Reduction (WCDRR) in its capacity as an IRDR International Centre of Excellence for Risk Education and Learning (ICoE REaL). This engagement both underlined and reinforced almost a decade of Periperi U’s focused effort in advancing disaster risk scholarship at local, national and continental scales in Africa.

In keeping with the current grant’s objectives to mobilise the consortium to advance disaster risk-related scholarship and practice in Africa, this 2014/5 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.

Internationally, this was reflected in Periperi U’s co-convening (with Kyoto University and the AUEDM) a side-event **at the WCDRR on the Role of Higher Education in Advancing Disaster Risk Reduction**. It was further indicated by IRDR’s request to convene its **14th Scientific and Technical Committee** meeting in Stellenbosch (November 2015) and the partnership’s involvement in the preparations for **UNISDR’s Science and Technology Conference** in January 2016.

Periperi U’s traction at continental scale was shown through its role in representing academia on the **African Working Group for Disaster Risk Reduction (AWGDRR)**. This was specifically reflected in the consortium’s participation in the 7th AWGDRR’s crucial consultation with African decision-makers in Yaoundé, Cameroon in July 2015 and subsequent High Level Meeting on Disaster Risk Reduction that resulted in the Yaoundé Declaration (<https://www.unisdr.org/archive/45209>).

The report is divided into 6 parts. **Section 2** details the accomplishments within each of the five key focus areas specified in the USAID grant, while **Sections 3** and **4** update progress on the evaluation and secretariat support to the partnership. **Section 5** revisits key programmatic constraints encountered during this period, while **Section 6** concludes the report.

2. Progress in Focus Areas

The current phase of the Periperi U programme sought “*[To] reduce disaster risks in selected African countries through improved national and local disaster risk management due to enhanced strategic human capacity to integrate risk reduction into critical developmental sectors and programmes*”.

Its overarching objective sought to “*build sustainable ‘multi-tasking’ capabilities in disaster risk and vulnerability reduction capacity building in ten selected institutions of higher learning in Africa from 2008 to 2011, consistent with global disaster reduction priorities reflected in the Hyogo Framework of Action.*”

In this context, the project was framed around **five focus areas**:

1. **Institutional embedding (i.e. sustainability)** of active disaster risk-related teaching and training, research and policy advocacy capacity with particular emphasis on urban and hydro-meteorological risks.
2. Enhancement of sustainable capacity for each university unit/programme to provide at least one-two **short disaster risk-related courses** annually and to design/implement one new course by 2014.
3. The **growth and sustainability of new undergraduate and/or graduate programmes** related to reducing/managing the risk and vulnerability profile of the country concerned.

4. The **generation and communication of applied research outputs by each unit/programme** related to the risks and vulnerabilities of the country concerned that increase local understanding and improve the management of those risks.
5. **Mobilisation of the consortium to advance disaster-risk reduction** efforts through the strategic engagement by each unit/programme institutionally, as well as at national/sub-national, continental and international scales with governmental, nongovernmental, international and scientific stake-holders.

2.1 Institutional embedding of active disaster risk-related teaching and training, research and policy advocacy capacity with particular emphasis on urban and hydro-meteorological risks.

An explicit focus of the current award is to institutionally embed applied disaster risk scholarship within the partner institutions. This is indicated both by growing staffing numbers involved in disaster risk-related teaching and research as well as increased financial sustainability and commitment of staffing support through core university funding.

During 2014/15, material progress in institutional embedding of disaster risk scholarship was indicated by:

- Growing institutional support for disaster risk-related scholarship by senior management, especially at BDU.
- Sustained numbers of university staff members directly involved in disaster risk-related research and teaching.

2.1.1 Growing institutional support in some universities

As the successful introduction of new fields of scholarship requires senior management support, some (not all) Periperi U programmes have benefitted from enabling internal institutional arrangements. During the 2014/15 reporting period, progress in institutional embedding was particularly apparent at Bahir Dar University, where the Department of Disaster Risk Management and Sustainable Development was upgraded to 'institute' status by the university's curriculum committee. The new centre is now known as the *Institute of Disaster Risk Management and Food Security Studies*, the first of its kind in Africa.

Bahir Dar University's sustained commitment to strengthen human capital in disaster risk management is illustrated in Table 2.1.1 below. This not only indicates the scale of programmes implemented since 2005, but also the employment profiles of students graduated since the BSc programme was initiated in 2005. 376 students have graduated of the 546 BSc DRMSD students enrolled since 2005, with 85% employed in either government or ngo or private organisations. Similarly, of the 75 MSc DRMSD students who have graduated, 100% are currently employed in government or NGO positions.

Table 2.1.1 Throughput of BSc and MSc students at Bahir Dar University and employment status

Programme	Total Enrolled	Total Graduated	Employing Organisation
Under-graduate (BSc DRMSD) (First offered 2005)	546	376	246 (65%) Govt (DRR and Food Security) 74 (20%) NGO/private 56 (15%) No information
Post-graduate (MSc DRMSD) (First offered 2008)	180	75	23 (30%) Govt 52 (70%) NGOs
Total	726	451 (62%)	

While at a technical level, new disaster risk-related academic programmes have been implemented across most partners, despite sustained internal advocacy, both Moi University (Kenya) and the USTHB (Algeria) continued to encounter institutional obstacles. Similarly, the expansion of teaching programmes at ABU, SU and UG has been delayed by internal resource constraints, while the dispersion of both the Moi and SU teams across separate buildings has hampered implementation.

2.1.2 The importance of institutional embedding – sustaining staff numbers

Encouragingly however, comparable staffing levels were sustained in 2014/15 to those a year earlier, with 170 members reported for this period. Of these, 78 staff members were employed permanently as programme administrators, lecturers and researchers (Table 2.1.2 and Figure 2.1.2. below). A further 92 staff members were considered adjunct staff, serving as part-time members such as contractual researchers, guest lecturers or as interns. GBU reported a significant increase in staffing during this period to accommodate its 30-student masters programme on the Prevention and Management of Food Insecurity.

Gender parity in the distribution of teaching and research staff remains an issue of concern. However, the marked differences in gender representation in Periperi U academic appointments reflect persisting gender disparities in higher education within sub-Saharan Africa. Currently, 35 (21%) of the 170 staff positions across the partnership are occupied by women, with 13 women staff concentrated in Moi and Stellenbosch alone (ironically, in programmes that have both encountered considerable institutional obstacles to implementation).

The regrettable absence of post-graduate funding to enable advanced disaster risk scholarship (eg to PhD level) remains a pervasive obstacle to nurturing talent within African universities, and specifically discourages promising women academics from pursuing the disaster risk domain – in favour of research fields that can assure post-graduate funding and well-defined career pathing.

Table 2.1.2 Distribution of staff positions in Periperi U by gender

Partner	Permanent staff		Adjunct staff		Total
	Male	Female	Male	Female	
Ardhi	5	1	7	0	13
BDU	9	2	8	1	20
GBU	17	0	26	1	44
Makerere	2	1	10	3	16
Moi	0	5	1	1	7
SU	2	6	1	1	10
Tana	5	2	5	3	15
UDM	9	1	6	3	19
UG	6	0	4	1	11
USTHB	4	1	8	2	15
Total	59	19	76	16	170

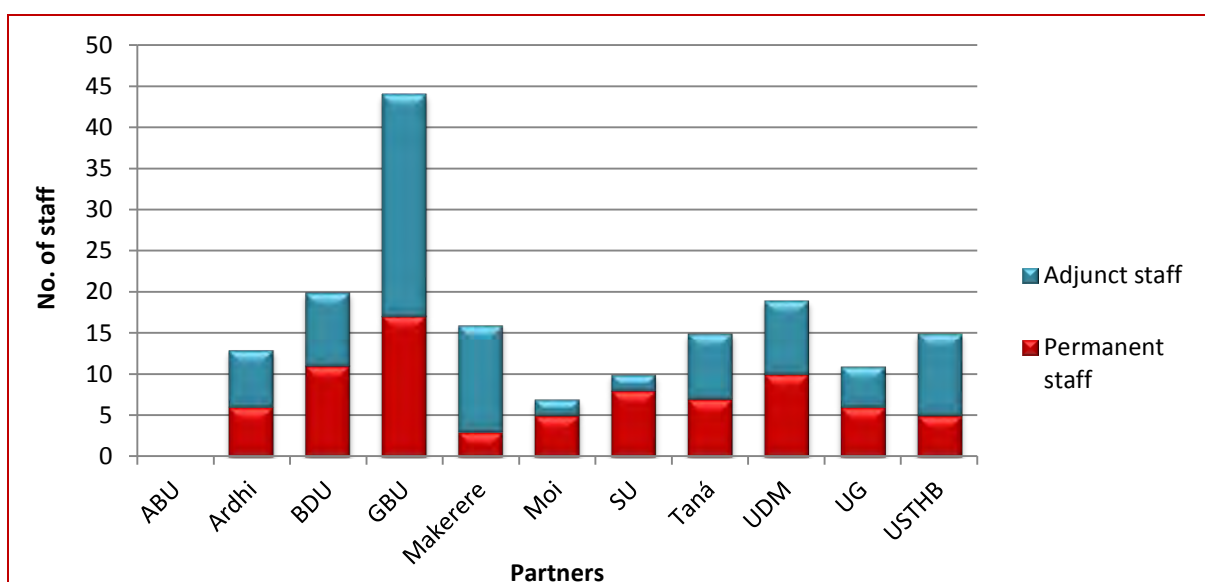


Figure 2.1.2 Periperi U Teaching, Research and Support Staff 2014/15

2.2 The enhancement of sustainable capacity for each university unit/programme to provide at least one-two short disaster risk-related courses annually and to design/implement one new course by 2014.

During 2014/15, 20 short courses were implemented by nine Periperi U partners, reaching 688 participants (see Appendix A1). This was 26% higher than the 547 participants who attended courses in 2013/14, with participation of 320 women (47%). Courses offered also reflected both diversity of topic and target group. Nine courses in Tanzania, South Africa, Ghana and Algeria were specifically geared to community and local-level disaster risk management capacity building, while more specialised courses related to flood- and food security- risks were offered respectively in Senegal and Ethiopia.



Figure 2.2: Short course held at GBU focused on Food and Health Risks as related to Flooding

Improvements in SU's disbursement of funds in 2014/15 facilitated short-course delivery, compared to previous years. External resourcing has proved particularly crucial to this Periperi U work-stream, given the limited funds available to local governments in the targeted countries. In this instance, the availability of USAID funds contributed significantly to partner capacity to deliver accessible and relevant short courses. (See Appendix A1 for a detailed summary of the short courses offered).

2.3 The growth and sustainability of new undergraduate and/or graduate programmes related to reducing/managing the risk and vulnerability profile of the country concerned.

2.3.1 Overview

The expansion of existing graduate and post-graduate programmes has emerged as a cornerstone for the partnership. Across the consortium there are now twelve undergraduate/post-graduate programmes and nine disaster risk-related modules incorporated within other existing academic programmes. In 2014-15, 597 new students registered for disaster risk bachelors' and masters' programmes or modules, with 346 continuing studies, and 130 graduating.

Altogether, 1,073 students were enrolled, including 426 undergraduate and masters students at Tanà who completed disaster risk-related modules in non-disaster risk-related academic programmes (see Tables 2.3.2.1 and 2.3.2.2 below). Following a lengthy preparatory phase, Gaston Berger University's MSc in the Prevention and Management of Food Insecurity Risks was launched in early 2015, with 34 students, including eight women. This represented the first francophonic masters degree of its kind in West Africa.



Figure 2.3.1 Students enrolled in BDU's BSc in Disaster Risk Management & Sustainable Development

Table 2.3.2.1 Periperi U Academic Programmes 2014 and 2015

Institution	Title of under/post graduate disaster risk-related programme
ABU	Masters in Disaster Management
	Postgraduate Diploma in Disaster Management
Ardhi	Master of Science in Disaster Risk Management (MSc. DRM)
	Master of Disaster Risk Management (MDRM)
BDU	BSc Disaster Risk Management & Sustainable Development
	MSc in Disaster Risk Management & Sustainable Development
GBU	MSc in the Prevention and Management of Food Insecurity Risks
Makerere	Masters in Public Health and Disaster Management
Moi	Food safety and hygiene (teaching component)
	Nutrition in Emergencies as part of MPH in Nutrition track
SU	Disaster Risk Studies (Module)
Tanà	MSc in Multidisciplinary Disaster and Risk Management
	Risk governance and sustainable development (<i>module in two master's programmes in Department of Economics</i>)
	Introduction to economic valuation tools (<i>module for junior year of the department of economics</i>)
UDM	BSc in Environmental Engineering and Disaster Management (Disaster risk evaluation)
	MSc in Technical Education, Development and Disaster Management
UG	Policies and Strategies for Integrated Disaster Risk Reduction (u'grad module)
	Applied Integrated Disaster Risk Reduction (IDRR) in Urban Ghana (u'grad)
	Theories & Analytical Methods for Disaster Risk Reduction (Masters Module)
	Concepts and Methods in Advanced Integrated Disaster Risk Reduction (Masters Module)
USTHB	Ph.D Programme

2.3.2 Current activities

During 2014 – 2015, a wide range of academic programmes were offered in English, French, and Portuguese, along with national languages, such as Malagasy, Amharic or Kiswahili.

During this reporting period, 1,073 students were enrolled in disaster-related academic programmes and modules. Across the consortium, this was reflected in more than 150 undergraduate and over 400 post-graduate students, including 25 students registered for disaster risk-related PhDs. A further 426 students were enrolled in disaster risk-related modules, that were integrated into undergraduate and post-graduate Economics Degree programmes at Tanà.

Table 2.3.2.2 Numbers of Periperi U Students and Programmes Oct 2014-Sept 2015

Institution	No. of programmes	No. of modules	New Enrolments	Continuing students	Students graduated	Total
ABU	2	0	109	0	0	109
Ardhi	2	0	20	0	6	26
BDU	2	0	83	89	105	277
GBU	1	0	34	0	0	34
Makerere	1	0	12	0	0	12
Moi*	0	2	0	8	0	8
SU*	1	1	11	1	12	24
Tanà	1	2 ²	250*	207**	0	457*
UDM	2	0	40	30	0	70
UG*		4	38	0	4	42
USTHB	0	0	0	11	3	14
Total	12	9	597	346**	130	1,073

*students enrolled in DR modules **students enrolments in modules as well as the DRM masters degree

2.3.3 Innovations to improve access and future directions

During the past year, several Periperi U partners also explored technological and other strategies to improve access to their university-based disaster risk programmes. For instance, UDM has developed an information system/platform for information sharing and e-learning for its disaster risk management graduate and undergraduate academic programmes. This has sought to improve distance-learning prospects across Mozambique. By the end of the reporting period, the e-learning platform was close to completion, with all hardware installed and only the uploading of programme content and translation still pending. The platform is expected to be operational by the start of the 2016 academic year.

RADAR/SU also sought to overcome obstacles to access for Bachelors-qualified students seeking to enrol in the recently approved MPhil Disaster Risk Science and Development, but who lacked the pre-requisite content knowledge or qualifications. In September 2015, this resulted in the submission of an application for a post-graduate diploma in Disaster Risk Studies and Development, which would provide a bridging qualification and broaden access to the masters programme for a greater diversity of students.

At ABU, UG and USTHB, discussions are continuing on modalities to expand existing offerings. For instance, ABU has proposed the introduction of Professional Masters, MPhil and PhD degrees in Disaster (Risk) Management. Through this configuration, the MPhil would serve as an academic bridge between the current Professional Masters in Disaster Management and possible PhD studies. Similarly, USTHB has begun to develop its integrated Master's degree in Engineering and Risk Management through a recent workshop to develop the curriculum. PhD students and disciplinary experts were invited to provide input and advice on content. (See Appendix A2 for detail on DRR-related academic programmes and modules).

² 2 modules offered to 5 masters programmes and 3 undergraduate programmes.

2.4 The generation and communication of applied research outputs by each unit/programme related to the risks and vulnerabilities of the country concerned that increase local understanding and improve the management of those risks.

2.4.1 Growing faculty and commissioned research

Building on its maturing post-graduate programmes and institutional capacities, the partnership substantially stepped up its generation and communication of applied disaster risk research during the past year. This was materially reflected in 25 faculty-initiated or commissioned research projects, 17 journal articles published or in-press and five published book chapters. These projects and outputs reflected wide-ranging topics, including urban risk, food insecurity, public health, and studies of hydrometeorological hazards. The advancement of continental disaster risk science capability was been further bolstered by an increasing enrolment of PhD students, with 24 now registered for disaster risk-related doctorates.

Table 2.4.1 illustrates selected research projects undertaken during this period. These signal the integrated focus of Periperi U partner research, along with a deliberate, incisive emphasis on highly vulnerable communities and a view to strengthen understanding of complex risk dynamics. (For more examples and information concerning the titles, themes and current status of the different partners' research outputs, see Table A3 in the appendices.)

Table 2.4.1 Examples of Periperi U faculty research undertaken 2014-15

University	Research title
ABU	Vulnerability and Capacity Assessment of Sabon Gar Local Government Area, Kaduna State, Nigeria.
Ardhi	Implementation of the National Land Policy and subsequent legislation with regard to hazardous land, Tanzania.
USTHB	Assessing urban planning to reduce impact on flooding in the city of Ghardaia, Algeria.
GBU	Dynamics of agricultural land and the risk to food insecurity in the Niayes region of Diamniadio, West of Senegal.
BDU	Impact of food security programs on households' economic livelihood capital: The case of Gayint Woreda, Ethiopia.
Tanà	Profile and characteristics of hydrometeorological hazard-resilient community in South East of Madagascar.
Makerere	Assessment of the implementation of Minimum Initial Service Package for sexual & reproductive health of refugees & host population in the West Nile District, Uganda.
SU	Everyday hazards and vulnerabilities among backyard dwellers: A case study of Vredendal North, Matzikama Municipality, South Africa.

2.4.2 Post-graduate student disaster risk research

Expanding post-graduate programmes across the partnership saw 83 postgraduate research projects reported by partners during the past year, 60 of which were completed by end of September 2015. While the topics were rich and highly varied, recurrent research themes probed flood risk, agricultural risk and food security, vulnerability assessments of communities and public health risks in vulnerable populations. Table 2.4.2 provides a snapshot of these studies, while more detailed information is available in Appendix A4.

Table 2.4.2 Illustrative examples of masters and PhD research undertaken 2014-15

University	Thesis title
Ardhi	Temporal and spatial trends of incidences and prevalence of communicable diseases during flood disaster in Kilosa, Tanzania.
Makerere	Spatial-temporal analysis of wetland encroachment: flood risk and adaptation in Kampala, Uganda. (PhD)
SU	Exploring the vulnerabilities of young men in informal settlements as a driver of urban risk, South Africa. (PhD)
Tanà	Vulnérabilité de la riziculture fluviale par rapport à l'inondation: cas du fokontany Ambaro-Bekibo, Madagascar.
UG	Hazards and vulnerability mapping for adaptation to climate risks in a savannah ecosystem: A case study of the Volta Basin, Ghana.
USTHB	Evaluation du potentiel de dommage dû aux mouvements du sol sous l'effet des séismes majeurs. (PhD)

2.5 Mobilisation of the consortium to advance disaster-risk reduction efforts through the strategic engagement by each unit/program institutionally, as well as at national/sub-national, continental and international scales with governmental, nongovernmental, international and scientific stake-holders.

2.5.1 Overview

Peripero U's strategic mobilisation component gathered increasing momentum in 2014/15. This element was purposefully incorporated into the partnership's model to enable a tighter interface between consortium members, policy makers and practitioners. At national and local levels, it was specifically intended to facilitate the generation of appropriately skilled human capital, through the design of relevant and appropriate curricula. At continental and global scales, the engagement component also sought to promote the role of (especially southern) higher education institutions as key partners in disaster risk-related capacity building and research.

During 2014/5, the benefits of strategic mobilisation were demonstrated by 65 partner engagements at local, national, regional and continental levels, along with partner mobilisation at a further 18 international events. These included the WCDRR in Japan, the World Congress on Disaster and Emergency Medicine in Cape Town and United Nations negotiations on the post-2015 Sustainable Development Agenda in New York.

Figure 2.5.1 represents the number and scale of engagement by partner in the past year. Altogether, 41 significant strategic engagements took place at local and national levels, with 24 regional and continental engagements and attendance at (or preparation to attend) 18 global events. These engagements range from the finalisation of cooperative agreements and MOUs with government for DRM-capacity building, to collaborations with international agencies, other universities and academic associations. (See Table A5 for more detail on engagements undertaken).

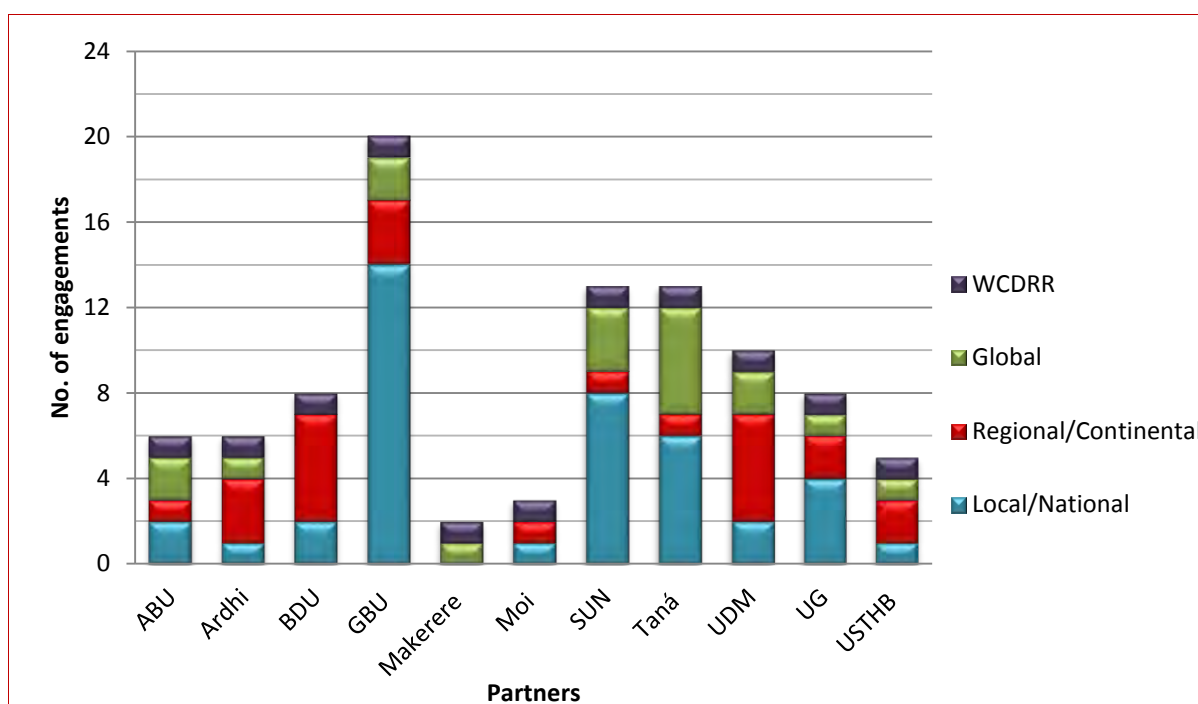


Figure 2.5.1 Strategic engagements by partner and scale 2014-15

2.5.2 Strategic engagement at local/national levels, as well as continental and global scales

In addition to their core teaching and research remits and regional/global engagements, Periperi U partners are centrally involved in shaping local and national disaster risk management policies, plans and practices. Tables 2.5.2.1 – 2.5.2.3 below provide insights on the range and reach of partner engagement (from local to global) to advance disaster risk scholarship and practice.

Table 2.5.2.1 Examples of Periperi U strategic engagement at local/national levels 2014-15

Process/Event	Nature of engagement and representation
Engagement with Tanzania Red Cross to secure student funding <i>August 2015, Dar es Salaam</i>	Ardhi successfully secured USD 6,000 to finance two DRM Masters students for their research projects. The funds were drawn from the “Zuia Mafuriko Dar es Salaam Project” (Prevent Floods in Dar es Salaam Project), implemented by Tanzanian Red Cross through funding from both the American and Danish Red Cross Societies. The funding opportunity was initiated by one of Ardhi’s former Masters graduates, recently employed by the Tanzanian Red Cross Society.
Strengthening cooperation with Senegal’s National Food Security Programme	GBU signed an MOU with the Executive Secretariat for the National Food Security Programme (under the Prime Minister of Senegal). The formal partnership will enable GBU on behalf of Periperi U to develop a capacity building programme through training, research and extension.
Strategic input on amendment of Disaster Management Act. <i>21-22 April 2015, Cape Town South Africa</i>	SU was invited to provide detailed input to the South African Parliamentary Portfolio Committee on Cooperative Governance and Traditional Affairs on proposed amendments to the Disaster Management Act.

Table 2.5.2.2 Examples of Periperi U strategic engagement at regional/continental scales

Process/Event	Nature of engagement and representation
Harmonising disaster preparedness teaching modules in ECOWAS 22 - 25 June 2015, Accra Ghana	Prof. Iguisi (ABU) attended a workshop organized by ECOWAS in collaboration with Ghana's National Disaster Management Organization (NADMO) and the Kofi Annan International Peacekeeping Training Centre (KAIPTC) in order to better streamline different disaster preparedness educational packages into a uniform teachable module across West and Central Africa.
Engagement with the IFRC on Law and Disasters 30 June – 1 July 2015 Addis Ababa, Ethiopia	BDU represented Periperi U at a consultative meeting in Addis Ababa Ethiopia on Law and Disasters from 30 June – 1 July, organised by the IFRC in partnership with the African Union Commission (AU). This was part of a regional consultation process in preparation for the 32nd International Conference of the Red Cross and Red Crescent Societies in Geneva, December 2015.
Informing Africa's policy for implementation of the Sendai Framework 21-22 July 2015, Yaoundé, Cameroon	The AWGDRR consultation in Yaoundé, Cameroon represented the first high-level engagement since the WCDRR, bringing together approximately 150 African representatives, as well as international organisations. The Periperi U secretariat engaged directly with UNISDR Nairobi to ensure Periperi U participation. Prof. Mateugue Diack (GBU) facilitated the "Understanding Risk" working group sessions, accompanied by Prof. Samuel Ayonghe, University of Buea, Cameroon.

Table 2.5.2.3 Examples of Periperi U strategic engagement at global scale

Process/Event	Nature of engagement and representation
Advocating for higher education engagement at the WCDRR 14 -18 March 2015, Sendai, Japan	24 Periperi U representatives attended the WCDRR. Their involvement included the IGNITE stage presentation by Djillali Benouar, USTHB , and Periperi U's co-hosting (with the Asian University Network on Environment and Disaster Management AUEDM) a side-event on the <i>Role of Higher Education Institutions (HEIs) in Advancing Disaster Risk Reduction</i> . This represented the first time HEIs from Africa and Asia had collaboratively led a joint event at the WCDRR. (See Appendix B.)
Profiling the role of science in the post-2015 Sustainable Development agenda 23-24 April 2015, New York City USA	Dr Holloway (SU) represented the Science and Technology Major Group through the International Council for Science (ICSU) at negotiations on the means of implementation for the post-2015 Sustainable Development agenda at the <i>United Nations in New York</i> . She delivered a formal statement to the Interactive Dialogue with Major Groups and other stakeholders.



Figure 2.5.2.3.1 Prof Benouar delivering a short presentation at the WCDRR Ignite Stage on Periperi U



Figure 2.5.2.3.2 Periperi U's co-hosting a side-event on the *Role of Higher Education Institutions (HEIs) in Advancing Disaster Risk Reduction*

3. Periperi U independent evaluation

During this reporting period, consortium members participated in a complex independent evaluation conducted by Professor Zenda Ofir. Preparatory arrangements for the detailed research began as early as April 2014 in Accra Ghana. However, site visits to Stellenbosch, Antananarivo, Bahir Dar, Accra and Algiers only took place between November 2014 and March 2015.

The evaluation exhaustively examined the strengths, opportunities and challenges of Periperi U's multi-disciplinary higher education collaboration. However, it also sought to generate insights that were applicable to disaster risk reduction capacity building beyond Africa. The complex evaluation methodology included a detailed stake-holder analysis, mini-case-studies at seven Periperi U partners, comparative, in-depth case-studies in four sites, self-completion of on-line surveys, a biblio-metric study and 100 key informant interviews.

Preliminary evaluation results were shared with consortium members in a session dedicated to evaluation feedback following the WCDRR in Sendai, with the draft report circulated by July 2015. By October 2015, the summative evaluation report was complete and submitted to USAID.

While the independent evaluation reported numerous findings related to Periperi U's effectiveness, it specifically underlined the importance of conceptualising disaster risk science scholarship as *context-sensitive, boundary-spanning and engaged*. It also stressed Periperi U's commitment to collective action and mobilisation of like-minded persons, as well as its leadership by (largely) African scholars who share professional values and a commitment to context-sensitive capacity building and knowledge generation.

4. SU/RADAR Secretariat Support to Periperi U

4.1 Overview

During 2014/15 the growth of needs from both within and outside the partnership placed substantial demands on the SU/RADAR secretariat. The secretariat responded to these in three ways:

- Improving operational support for core Periperi U activities.
- Facilitation of strategic international engagement and cooperation.
- Strengthening website capacity and e-library capability.

4.2 Operational support for core Periperi U activities

The secretariat's operational support for core Periperi U activities was expressed in four forms; support for the day-to-day running of the consortium (including financial management and reporting to USAID), enablement of the annual consultative meeting in Dar es Salaam in close cooperation with Ardhi, support for the summative evaluation and measured expansion of the partnership.

From November 2014, the secretariat's capacity to manage a rapidly expanding remit was substantially enabled by the appointment of a highly skilled project accountant/auditor. This resulted in the introduction of financial monitoring and control systems that streamlined the management of Periperi funds. Secretariat capability was further strengthened by restructuring of responsibilities that largely separated RADAR's teaching and academic remit from its international academic networking roles.

4.2.1 Support for day-to-day Periperi U activities

As Periperi U project manager, RADAR/SU has actively supported the partnership by facilitating transfers of funds, securing international flight authorisations and ensuring reporting compliance as required by the current grant. From October 2014 – August/September 2015, SU disbursed USD 1,160,950 to its partners. The secretariat also reserved and ticketed 43 international flights for meetings, conferences and exchange visits. In addition, it secured a no-cost project extension from USAID/OFDA from the original 30 June 2015 closure date to 31 March 2016.

4.2.2 Periperi U annual consultative meeting (Dar es Salaam, 11-12 October)

Although the consortium's annual meeting was convened from 11-12 October 2015, the secretariat had finalised virtually all travel and accommodation arrangements by 30 September. In parallel, it negotiated Periperi U's participation at the 6th Annual African Network for Internationalization of Education (ANIE) Conference Dar es Salaam, scheduled for 7-9 October. The preparatory discussions with ANIE resulted in a dedicated disaster risk reduction themed session at the conference, underwritten by a signed MOU between SU and ANIE.

4.2.3 Support for summative evaluation

As already outlined in Section 3., substantial support was extended by the secretariat to the summative evaluation process. This entailed flight reservations, contracting of eight national and local consultants, as well as extensive compilation of data.

4.2.4 Potential Consortium expansion

In keeping with its commitment to strengthen pan-African disaster risk scholarship, the secretariat facilitated the signing of an MOU between SU and ABU. In June 2015, it also initiated contact with the University of Buea (UB) in Cameroon, to explore prospects for the inclusion of a Central African university partner. In response, Professor Ayonghe (UB) was able to join Prof. Diack (GBU) in discussions at the AWGDRR in Yaoundé, substantially strengthening the science and academic inputs in the regional deliberations.

Following on from expressions of interest at the WCDRR, the secretariat, along with Ardhi, also actively began exploring the prospect of a Periperi U affiliate partnership programme, which would extend connections and open a wider network of engagement and collaboration. A draft framework was developed, along with an affiliate programme proposal, which was submitted for discussion at the annual consultative meeting in October 2015.

4.3 Facilitation of strategic international engagement and cooperation

During 2014/15, the partnership's growing profile called for intensified support by RADAR/SU. This focused on preparations for the WCDRR in Sendai and AWGDRR in Yaoundé. However, as the year progressed, additional coordination and facilitation requests arose in connection with the 14th IRDR Scientific Committee meeting and UNISDR Science and Technology Conference in Geneva, 2016.

4.3.1 Preparations for the WCDRR in Sendai and AWGDRR in Yaoundé

The secretariat organised and facilitated a delegation of 24 Periperi U representatives (from 11 different African countries) to attend the United Nations' World Conference on Disaster and Risk Reduction (WCDRR) from 14 -18 March 2015. The preparatory logistics and administrative demands were considerable, requiring two-three dedicated staff members' support almost continuously from October 2014 until March 2015. Similarly, RADAR engaged directly with United Nations International Strategy for Disaster Reduction (UNISDR) Nairobi to ensure a Periperi U presence at the July 2015

AWGDRR in Yaoundé. This resulted in representation both from Gaston Berger University, Senegal and the University of Buea, Cameroon.

4.3.2 Forthcoming consultations and events

Following discussions with the IRDR's former director, Stellenbosch University was requested to host the 14th IRDR Scientific Committee meeting Stellenbosch, South Africa from 16 -18 November 2015. This represented the first occasion that the IRDR SC had convened outside China or Europe. From September 2015, the RADAR team actively coordinated with IRDR, UNISDR and ICSU to plan the global meeting. Similarly, in its capacity as secretariat for the ICoE REaL, RADAR was invited to assist in co-organising the Capacity Development work-stream of the forthcoming UNISDR Science and Technology Conference planned for January 2016.³

4.4 Website capability and e-library capability in 2015/16

During 2014-15, the secretariat gave priority to strengthening its on-line presence. This included the appointment of a dedicated external communications staff member and revamp of the Periperi U website (riskreductionafrica.org or 'RRA'), which was completed in November 2014. The revamp was also prompted by the secretariat's decision to digitise the UNISDR's former Geneva-based hard-copy and construct an online library portal for the partnership library.

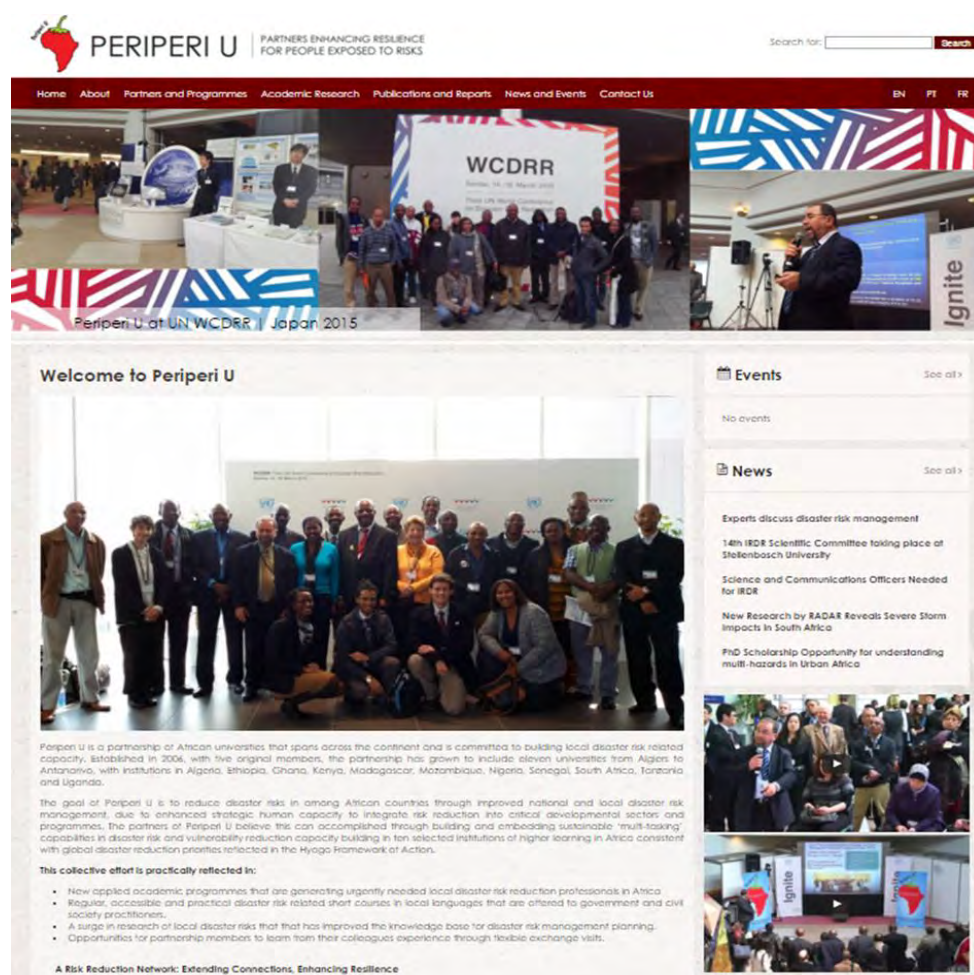


Figure 4.4 Screenshot of Periperi U's official website www.riskreductionafrica.org

³ <http://www.unisdr.org/partners/academia-research/conference/2016/>.

The previous year, UNISDR shipped its entire hard-copy library to South Africa to ensure the material's preservation and digitising. From May 2015, the e-library team finalised the library's IT architecture, as continued with the detailed task of sorting, digitising and uploading thousands of published and unpublished documents for the online library.

5. Programmatic Constraints

As in previous years, timely transfer of funds to partners remained problematic until early 2015. Delayed funding transfers to Tanà, Moi and UG in November and December 2014 (only received in March 2015), for instance, adversely affected implementation of planned activities such as short courses. With the introduction of more systematic management of working advances in 2015, partner cash-flow became more predictable across the partnership.

Other persisting challenges included the slow pace of internal curriculum approval which, in this Periperi U phase, has particularly delayed the introduction of new academic programmes at Moi University. Similarly, the continued absence of student financial support persists in discouraging greater uptake of academic offerings for talented and committed students as well as mature practitioners.

Additionally, the secretariat's focused efforts at diversifying the partnership's funding base have proved unsuccessful. Negotiations with other bilateral funding partners and foundations did not yield positive results over this period, despite the rising visibility of the partnership and highly positive evaluation findings.

6. Conclusion

Despite the challenges associated with a rapidly developing, multi-scalar initiative, Periperi U has maintained and extended its capacity. While the original proposal anticipated a four-year target of 2,000 direct beneficiaries, in 2014/15 alone, the partnership reached more than 1,700 students and short course participants. This total does not include government and other stake-holders that partners engaged in local and national consultations or decision-makers at regional and continental scales.

These results signal solid progress in advancing Africa-based disaster risk scholarship and the potential for sustainable capacity building in this field that is possible when African institutions of higher learning are materially and collegially supported. However, the persisting challenges in resource-mobilisation beyond USAID/OFDA underscore a growing need for funding diversification to ensure the maturation and future sustainability of consortium efforts.

APPENDICES

Appendix A: Focus Area Tables

Appendix A1: Short courses implemented between 1 October 2014 - 30 September 2015

Table A1: Periperi U short courses run and attendance 1 October 2014 to 30 September 2015

Institution	Name of Short Course	Dates held	No. of participants		Total
			Men	Women	
Ardhi	Temeke municipality Ward Disaster Management Committees (WDMCs') Short course	21-22 Oct 2014	25	32	181
	Temeke municipality Ward Disaster Management Committees (WDMCs') Short course	23-24 Oct 2014	20	32	
	Locating and Mapping of Critical Infrastructure and Incidents	16 May 2015	2	15	
	Introduction to and the Role of Kibaha Town Council in DRR	27 May 2015	11	13	
	Introduction to and the Role of Mkuranga District Council in DRR'	4 Jun 2015	18	13	
BDU	Statistics and SPSS software	3-7 Feb 2015	19	3	40
	Livelihoods, Early Assessment and Protection (LEAP) - Food Security Early Warning Tool	20-26 Apr 2015	15	3	
GBU	'Food and Health Risks as related to Flooding in the Region of Saint-Louis, Senegal'	21-24 Apr 2015	17	5	22
Makerere	Advanced Qualitative Research Methods for Health Scientists	17-26 Sep 2015	8	0	8
SU	'Community Risk Assessment: Focus on informal settlements'	29 Jun-3 Jul 2015	7	4	11
Tanà	Initiation aux concepts de Gestion / Réduction des Risques et des Catastrophes et le Développement (4 courses in the Amoron'i Mania, Atsinanana, Boeny and Vakinankaratra administrative regions)	11-12 Nov 2014	62	31	93
UDM	Risk Management for the Energy sector	11-12 June 2015	59	101	160
UG	Community Information Base for Environmental Health Management (EHM) and DRR	12-15 Jan 2015	19	13	61
	Strategies for community resilience building in urban Ghana	19-22 Jan 2015	17	12	
USTHB	DRR short course for civil protection	26-30 Oct 2014	10	0	112
	DRR short course for civil protection	23-27 Nov 2014	10	0	
	Disaster Risk Reduction for journalists	8 -10 Feb 2015	13	10	
	GIS for Disaster Risk Management	1-5 Mar 2015	36	33	
Total			368	320	688

Appendix A2: Academic programmes conducted between 1 October 2014 - 30 September 2015

Table A2.1 summative list of student numbers per partner

Institution	No. of programmes	No. of modules	New Enrolments	Continuing students	Students graduated	Total
ABU	2	0	109	0	0	109
Ardhi	2	0	20	0	6	26
BDU	2	0	83	89	105	277
GBU	1	0	34	0	0	34
Makerere	1	0	12	0	0	12
Moi	0	2	0	8	0	8
SU	1	1	11	1	12	24
Tanà	1	2 ⁴	250	207*	0	457*
UDM	2	0	40	30	0	70
UG		4	38	0	4	42
USTHB	0	0	0	11	3	14
Total	12	9	597	346*	130	1,073

*includes 31 continuing DRM masters students and 176 students in Tanà modules in other non-disaster risk themed programmes

⁴ 2 modules offered to 5 masters programmes and 3 undergraduate programmes.

Table A2.2 Detailed list of student numbers in under/post graduate programmes

Institution	Academic Programme	Module Name	New Enrolments	Continuing students	Students graduated	Total
ABU	Masters in Disaster Management	N/A	83			109
	Postgraduate Diploma in Disaster Management	N/A	26			
Ardhi	Master of Science in Disaster Risk Management (MSc. DRM)	N/A	9 (Oct 2014)		2(Oct 2014)	26
	Master of Disaster Risk Management (MDRM)	N/A	11 (Oct 2014)		4 (Oct 2014)	
BDU	Postgraduate Programme: MSc in Disaster Risk Management & Sustainable Development	N/A	55 (Oct 2014)	48	29 (Dec of 2014 and July 2015)	277
	Undergraduate Programme: BSc in Disaster Risk Management & Sustainable Development	N/A	28 (Oct 2014)	41	76	
GBU	Master of Disaster Risk Prevention and Management for Food Security	N/A	34 (Oct 2014)			34
Makerere	Masters in Public Health and Disaster Management	N/A	12 (Jan 2015)			12
Moi	Food safety and hygiene (teaching component)	N/A		4		7
	Nutrition in Emergencies as part of MPH in Nutrition tract	N/A		3		
SU	N/A	BA/BSc Honours in Geography and Environmental Studies (Disaster Risk Studies Module) ⁵	11 (Feb 2015)		9 (Nov 2014)	24
	N/A	MA/MSc in Geography and Environmental Studies (DRS Thesis specialisation)		1	3 (March 2015)	
Tanà	MSc in Disaster and Risk Science	N/A		31		457
	N/A	Risk governance and sustainable development (Module in Mphil in Money, Bank and Finance)		19		

⁵ Two separate classes; one class running between Feb – Nov 2014 and another running between Feb – Nov 2015.

	N/A	Risk governance and sustainable development (Module in MSc in Local Development and Project Management)		57		
	N/A	Risk governance and sustainable development (MSc in Environmental Policy and Assessment)		24		
	N/A	Risk governance and sustainable development (MPhil in Development Economics)		39		
	N/A	Risk governance and sustainable development (Module in MPhil in Public Economics and Environment)		37		
	N/A	Economic valuation tool introduction (Module in Macroeconomics and modelling undergraduate course)	102 (Jan 2015)			
	N/A	Economic valuation tool introduction (Module in Public affairs undergraduate course)	55 (Jan 2015)			
	N/A	Economic valuation tool introduction (Module in General Economics undergraduate course)	193 (Jan 2015)			
UDM	BSc in Environmental Engineering and Disaster Management (Disaster risk evaluation)	N/A	40 (Oct 2014)			70
	Msc in Technical Education, Development and Disaster Management	N/A		30		
UG	N/A	Policies and Strategies for Integrated Disaster Risk Reduction Applied Integrated Disaster Risk Reduction (IDRR) in Urban Ghana	20			42
	N/A	Theories and Analytical Methods for Disaster Risk Reduction (Masters Module)	9 (Jan 2015)		4 (Jul 2015)	
	N/A	Concepts and Methods in Advanced Integrated Disaster Risk Reduction (Masters Module)	9 (Jan 2015)			
USTHB	Ph.D			11	3 (Jul 2015)	14
Total	12	9	597	346	130	1,073

Appendix A3 - Applied research outputs ongoing and completed between 1 October 2014 - 30 September 2015

Table A3.1: Summative list of Applied research outputs

Institution	Research Reports		Journals		Book contributions		total
	Ongoing	Completed	In Press	published	In press	published	
ABU	1	1	0	0	0	0	2
Ardhi	3	0	1	3	0	0	7
BDU	4	0	0	0	0	0	4
GBU	0	0	0	0	0	1	1
Makerere	1	2	1	0	0	0	4
Moi	2	2	3	4	0	0	11
SU	3	0	2	3	0	3	11
Tanà	3	0	0	0	0	0	3
UDM	0	0	0	0	0	0	0
UG	2	0	0	0	0	1	3
USTHB	1	0	0	0	0	0	1
Total	20	5	7	10	0	5	47

Table A3.2: detailed list of Applied research outputs

ABU		
Research title	Output	Research phase
Vulnerability and Capacity Assessment of Sabon Gar Local Government Area, Kaduna State, Nigeria	Professional Academic Research	On-going
Proceedings of the International conference on Disaster Risks Reduction	Conference Report	Completed
Application of pesticides in vegetable farming in Dar Es Salaam	Faculty Research project	On-going
Implementation of the National Land Policy and subsequent Legislation with regard to hazardous land	Faculty Research project	On-going

Situational Analysis of Fire Hazard preparedness in Learning Institutions	Faculty Research project	On-going
Recovery after floods: A Case of Rental Housing Business in Keko Machungwa Informal Settlement, Dar es Salaam, Tanzania. International Journal of Disaster Recovery and Business Continuity	Journal article (International Journal of Disaster Recovery and Business Continuity. Vol. 5: 15-28)	Published
Assessment of adaptation strategies to flooding: A comparative study between informal settlements of Keko Machungwa in Dar es Salaam, Tanzania and Sangkrah in Surakarta, Indonesia.	Journal article (Jàmbá: Journal of Disaster Risk Studies 6(1))	Published
Government and Community Involvement in Environmental Protection and Flood Risk Management: Lessons from Keko Machungwa, Dar es Salaam, Tanzania	Journal article (Journal of Environmental Protection, 5: 760-771)	Published
Implementing climate change adaptation and mitigation interventions at the local government levels in Tanzania: Where do we start?	Journal article (Current Opinion on Environmental Sustainability)	In press
BDU		
Research title	Output	Research phase
Climate Induced Vulnerability to Food Insecurity in Pastoral Areas of Ethiopia: The Case of Afar Regional State;	Academic Research	On-going
Impact of Food Security Program on Households Economic Livelihood Capital: the Case of Amhara Regional State	Academic Research	On-going
Assessment of Opportunities and Challenges of Pig Production in Amhara Region: A case study from urban and peri-urban peasant association of Bahir Dar City	Academic Research	On-going
Community Based Solid Waste Management at at Zenzelima Kebele Administration	Academic Research	Unable to be finalised due to internal administrative problems
GBU		
Research title	Output	Research phase
Using Agricultural Management Practices to Restore Lands Affected by Salinization Process under Changing Climate Conditions: Impact on Food Security in the Senegal River Valley	Conference paper	Accepted
Relationships between food safety and food quality for better response to crisis in the regions of Saint-Louis, Louga and Matam of Senegal	Professional academic research	On-going
Endogenous knowledge and development of fish farming in the Senegal River Valley: Issues	Professional academic research	On-going

of integrating fish farming and cropping under irrigated conditions		
Rational management of pest of solanaceous vegetable crops and improvement of the quality of the produce in the delta and the middle Senegal River valley	Professional academic research	On-going
Skills and strategies of the stakeholders in the Senegal River Valley for managing natural hazards and vulnerability for food security	Professional academic research	On-going
Managing risk for pests to ensure the availability of banana seeds in the delta and the Senegal River Valley	Professional academic research	On-going
Vulnerability of the paddy soils and increase in the salinization process in the Senegal River Delta: the comparative benefits of using phosphogypsum, organic fertilizer and biochar for soil restoration	Professional academic research	On-going
Dynamics of the farm lands in the Niayes region and risk of food insecurity	Professional academic research	On-going
Predicting rainfall events as tools for decision support for agriculture in Senegal	Professional academic research	On-going
Information system for securing land, in a food safety perspective applied to the community of Mbane in Senegal	Professional academic research	On-going
Makerere		
Research title	Output	Research phase
Rapid assessment of the implementation of Minimum Initial Service Package for sexual and reproductive health of refugees and host population in West Nile refugee affected districts. Faculty Research.	Faculty research Project	On-going
The enigmatic nodding syndrome in northern Uganda: Burden and national response strategies	Journal article: <i>Health Planning and Policy</i> , June 2015.	Published
Use of mobile phone consultations during home visits by Community Health Workers for maternal and newborn care: community experiences from Masindi and Kiryandongo districts, Uganda	Journal article: <i>BMC Public Health</i> June 2015.	Published
Cholera outbreak in Butabika mental hospital, Kampala.	Journal: <i>American Journal of Public Health</i>	Accepted – awaiting publication
Moi		
Research title	Output	Research phase
A survey on patient satisfaction with nursing care at a large Referral Hospital in Kenya	Journal article (Journal of Biology, Agriculture and Healthcare, 4(26))	Published
Barriers and successes in using core groups to improve intake of prenatal micronutrients to	Journal article	Published

improve maternal-neonatal health in rural Kenya,	(African Journal of Health Sciences, 27(3))	
Nurses Perception of their Work Environment at a Referral Hospital in Western Kenya	Journal article (Journal of Nursing and Health Science, 3(6))	Published
Dietary Intake of School children and Adolescents in Developing Countries	Journal article (Annals of Nutrition and Metabolism; 64 (Suppl):24-40)	In press
Community Risk Assessment in Kerio County, Riftvalley region in Kenya During the first quarter of the year	Professional research	On-going
Community Risk Assessment	Community Risk Assessment	Completed
Community Based Research (COBES)	Community Research reports	Completed
Jigger Intervention	Community Risk Assessment	On-going
Is there a Threshold Level of Maternal Education Sufficient to Reduce Child Undernutrition? Evidence from Malawi, Tanzania and Zimbabwe.	Journal article: BMC Paediatrics	In press
Nutrient Intake and Risk factors of Obesity and hypertension among Moi University undergraduate students at the College of Health sciences	Journal article: BMC Paediatrics	In press
SU		
Research title	Output	Research phase
Built-in Risk: Linking Housing Concerns and Flood Risk in Subsidized Housing Settlements in Cape Town, South Africa	Journal article (International Journal of Disaster Risk Science 5:313–322)	Published
Everyday hazards and vulnerabilities among backyard dwellers: A case study of Vredendal North, Matzikama Municipality, South Africa	Journal article	In press
"Small cities and towns in Africa: The challenge and opportunity of climate change" in Urban Vulnerability and Climate Change in Africa. Springer	Chapter in book	Published
Global risks: Pool knowledge to stem losses from disasters	Peer-reviewed journal - Nature	Published
Global Assessment Report on Disaster Risk Reduction 2015: Strategic mobilisation of higher education institutions in disaster risk reduction capacity building: Experience of Periperi U	Professional academic research	Published
Advancing disaster risk governance in Madagascar: The role of higher education	Chapter in book	Published

institutions		
Post-Event assessment of four severe-weather events in the Western Cape	Professional faculty research	Consolidation of analysis and findings, and generation of synthesis report
Strengthening urban resilience in African cities	Research project sponsored by ActionAid	On-going
Community risk assessment and disaster mitigation: Case studies from Philippi informal settlements	Chapter in book	Published
Investigating knowledge and preparedness of proximal residents to a general emergency event at the Koeberg nuclear power station. Jàmbá: Journal of Disaster Risk Studies	Peer-reviewed journal (Jàmbá Journal of Disaster Studies In press)	In press
Tanà		
Research title	Output	Research phase
DRR, resilience and development in the Southeast part of Madagascar	Professional academic research	On-going
Describing and measuring community resilience to inundation	Professional academic research	On-going
Profile and characteristics of hydrometeorological resilient community	Professional academic research	Ongoing - Planned to be completed in September 2015
UG		
Research title	Output	Research phase
Environmental Health and Disaster Risks, Livelihoods and Ecology within the Korle Lagoon Complex in Accra, Ghana	Book	Published
Environmental health and grassroots governance in Sabon Zongo	Professional academic research	On-going
disaster risks and vulnerability assessment of peri-urban areas of the Adenta Municipality	Faculty Research	On-going
USTHB		
Research title	Output	Research phase
Untitled research project focused on flooding in the city of Ghardaia	Faculty Research	On-going

Appendix A4 - Student Theses ongoing and completed between 1 October 2014 - 30 September 2015

Table A4: summative list of student research

Institution	Honours Research		Masters Theses		PhD Theses		Total
	Ongoing	completed	Ongoing	completed	Ongoing	completed	
ABU	0	0	83	1	1	0	85
Ardhi	0	1	20	6	0	1	28
BDU	0	0	75	29	0	0	104
GBU	0	0	34	0	2	0	36
Makerere	0	0	12	1	0	0	13
Moi	0	0	7	7	2	0	16
SU	3	5	1	3	1	0	13
Tanà	0	0	18	1	2	1	22
UDM	0	0	29	1	0	0	30
UG	0	0	9	4	0	1	14
USTHB	0	0	0	0	11	3	14
Total	3	6	288	53	19	6	375

Periperi U



COMPILED BY:

Ailsa Holloway, Alberto Francioli, Gillian Fortune, Patricia Zweig

Research Alliance for Disaster and Risk Reduction (RADAR)
Stellenbosch University
SOUTH AFRICA

Contact the secretariat:

Email: albertofrancioli@sun.ac.za

Tel: +27 21 808 9401 | +27 21 808 9285

www.riskreductionafrica.org

