

## **Application**

### **Building Stronger Universities in Developing Countries (BSU)**

**Project title:** Capacity Building within Research Communication, Dissemination and Networking

**Project period:** 1 January 2013 – 31 July 2015

**Budget:** DKK 19 million, divided equally on the four thematic platforms

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## List of Abbreviations

BSU	Building Stronger Universities
DKK	Danish Kroner
DKUNI	Universities Denmark
GEP	Growth and Employment Platform
GU	Gulu University
KCMC	Kilimanjaro Christian Medical Centre
KNUST	Kwame Nkrumah University of Science and Technology
LFA	Logical Framework
MSU	Maseno University
NIMR	National Institute for Medical Research
PBL	Problem-Based Learning
PEC	Platform on Environment and Climate
PHH	Platform on Human Health
PSDR	Platform on Stability, Democracy and Rights
SUA	Sokoine University of Agriculture
SUZA	State University of Zanzibar
TOT	Training of Trainers
TU	Tribhuvan University
UG	University of Ghana
UD	Universities Denmark
UDSM	University of Dar es Salaam
ZCHS	Zanzibar College of Health Sciences

## 1. Introduction

The project will be implemented through the current BSU platform structures under Universities Denmark with equal budgets (4.75 million) for the four thematic platforms and with the same south partner institutions as for BSU Phase 1. The project will be guided by the same overall conditions as agreed for BSU Phase 2 in terms of co-funding and overhead. The south/north distribution of the total budget will be 55/45. The project will be reported separately.

## 2. The planning process

The application is the result of a close dialogue with the south partners of the four thematic platforms. In the spring of 2012 the partner institutions were requested to identify specific capacity building needs related to effective communication and dissemination of research. A summary of the survey was presented to the Danish Ministry of Foreign Affairs in a status report of 29 June 2012.

**Figure 1: Partner cooperation**

	<b>Environ- ment &amp; Cli- mate</b>	<b>Growth &amp; Employment</b>	<b>Human Health</b>	<b>Stability, Democracy &amp; Rights</b>
<b>Ghana:</b> KNUST	x	x	x	
University of Ghana	x	x	x	
<b>Kenya:</b> Maseno University				x
<b>Nepal:</b> Tribhuvan University				x
<b>Tanzania:</b> Kilimanjaro Christian Medical Centre			x	
National Institute for Medical Research			x	
Sokoine University of Agriculture	x	x		
State University of Zan- zibar			x	
University of Dar es Salaam	x	x		
Zanzibar College of Health Sciences			x	
<b>Uganda:</b> Gulu University				x

On 27-29 August 2012 a joint Planning and Networking Workshop with representatives from all south partner universities and the Danish platforms' steering committees and resource persons was held in Roskilde. Subsequently, bilateral meetings and visits to Danish universities took place at platform level.

The objective of the workshop was to create a common understanding of the institutional capacity building concept within BSU in general, and to develop ideas for specific activities within six thematic focal areas identified in the initial dialogue. The six thematic focal areas were: E-learning; Fundraising; Outreach Strategies; PhD Systems; Problem-Based Learning and Research Networks. All six themes have been found central to BSU and will be considered for Phase 2.

Thus, the planning workshop was not solely aimed at preparing the specific Capacity Building within Research, Dissemination and Networking proposal but had a wider scope of including issues of relevance for the upcoming Phase 2 of the BSU initiative. For instance, the theme on PhD systems was not seen as related to the research dissemination and communication allocation.

Following the August workshop, the input was discussed at several levels: Internally by each platform and its partners, at joint DKUNI meetings for platform leaderships and by the DKUNI Working Group on BSU.

### **3. Priorities**

As a result of the dialogue, and after discussions with the Ministry of Foreign Affairs, the following three thematic focal areas have been identified for the additional BSU grant focusing upon research dissemination and communication and project documents prepared at platform level:

- Knowledge Sharing, Research Dissemination and Communication
- E-learning
- Problem-Based Learning

The strategy and approach for each of the thematic areas are presented in the following sections.

It should be noted that a number of the activities in this project will be closely coordinated with already on-going activities in Phase 1 and planned activities in Phase 2 in order to capitalise on potential synergies.

### **4. Objectives**

The proposed activities for this project are planned within the overall BSU framework. The development objective of the project is:

- BSU south partner universities strengthened in knowledge sharing, research dissemination and communication

The immediate objectives agreed across the four platforms are:

- BSU south partner universities' institutional capacity in knowledge sharing, research dissemination and communication strengthened
- BSU south partner universities' institutional capacity in e-learning strengthened
- BSU south partner universities' institutional capacity in Problem-Based Learning (PBL) strengthened

While strengthened capacity in knowledge sharing, research dissemination and communication is the overall priority for the project, strengthened capacity in e-learning and Problem-Based Learning is seen as other key areas that are in high demand from the south partners and can make vital contributions to achieve the full potential within knowledge sharing, research dissemination and communication.

Detailed activity plans and budgets for each south partner will be developed by the platforms.

In the planning process the platforms have identified a number of activities that to a large extent will be organised as joint activities across the platforms. See section 6.

## 5. Thematic Areas

Strategy and approach for the prioritised, thematic areas: <sup>1</sup>

### 5.1. Knowledge Sharing, Research Dissemination and Communication

Knowledge sharing, dissemination and communication is the key focal area for the activities under this specific grant. All south partner institutions have expressed interest in building and strengthening their capacities in this field. There is a growing understanding that the universities have an obligation to the wider society to strengthen their communication and dissemination of research findings, thus contributing to develop and implement solutions to prevailing challenges in today's society. At the same time improved communication and dissemination will strengthen the universities' networks to society and probably society's willingness to prioritise funds to the university sector.

The planned approach includes a wide range of activities from mapping of current activities and capacities, development of strategies as a basis for prioritising activities and the actual planning and implementation of activities.

The mapping will form a baseline for understanding priority target groups, current channels and types of information dissemination, their importance and impact and funding.

The proposed activities include: I. Strengthening of capacities to disseminate research findings to policy makers and other stakeholders and capacities for community outreach; II. Pilot activities in establishing and managing multi-stakeholder knowledge and dissemination networks; and III. Courses in communication skills, scientific proposal development and fundraising.

These activities will to the degree possible be carried out across the south partner universities in collaboration with the thematic platforms. Workshops and training sessions will mostly be at national or at south partner university level, as applicable.

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<sup>1</sup> Extracts of the concept notes developed during and after the August workshop are attached as annex. For full presentations and reports, see: <http://bsuud.org/news/show/artikel/presentations-at-planning-workshop-27-29-august-2012/>

In addition the platforms will run specific activities addressing the individual platforms' and partners' specific needs.

For instance, the Platform on Stability, Democracy and Rights plans to develop an e-learning course on writing skills in English for purposes of dissemination to both the international research community and to stakeholders who may not have knowledge of local languages (e.g. international business people, government officials from beyond national boundaries). This has a high priority at Tribhuvan University in Nepal where there already is a strong tradition for research dissemination in Nepali. The course can be implemented at other partners, if relevant.

The Platform on Human Health will undertake activities to strengthen the capacity to synthesize, repackage, translate and disseminate research findings to policy makers and other stakeholders. A number of related activities within these fields have already been initiated as part of PHH Phase 1 thus activities under the new grant will in part be a continuation and expansion of these.

The Platform on Environment and climate will form a communication network across its south partner universities with a thematic focus on "Climate change impacts, adaptation and mitigation". It will have the primary objective of synthesizing current knowledge on climate change and climate related challenges in Sub-Saharan Africa. Communication will be directed to a range of end users ranging from university studies, high schools, policy makers and other decision makers. A short course on writing policy briefs and other communication material will be part of the activities.

## **5.2. E-learning**

The partner universities in the south see possibilities for strengthening their capacity in training, research, communication and dissemination through better use of ICT. ICT skills are seen as a key competence which both faculty staff and students need to master. More ways of addressing the needs have been discussed with e-learning being identified by all as an area of high priority. Since Denmark is considered to be in the forefront internationally when it comes to use of ICT in learning within public funded higher education, it has been an obvious choice to prioritize e-learning in the project.

The e-learning activities will, with some adaptation matching the individual needs, focus on 1) mapping resources and sharing existing experience at the universities; assessing the needs and support development of e-learning strategies; 2) enhancing the technical capacity and infrastructure; 3) enhancing the general e-learning capacity among staff; 4) enhancing staff e-learning capacity within platform specific themes, and; 5) sharing and evaluating experience with e-learning gathered during the project period.

The planned activities will build upon on-going e-learning activities by most platforms during Phase 1. Thus, the proposed activities will be based on the experience gained so far and are foreseen to draw on the skills of already identified resource persons among partner institutions in the south and in Denmark.

A large proportion of the general e-learning activities, including introductions, training-of-trainers, and development of online courses focusing on generic skills, will be planned and implemented as joint activities across platforms.

Within each platform more tailor-made activities will be developed to meet the specific needs of the partners. For instance, the Human Health Platform plan initiatives that will lead to the development of distance and e-learning based Masters and Ph.D. courses aimed at developing a coherent e-based curricular or blended learning curricular. Thus initial activities funded by the communication and dissemination grant are foreseen to be supported by parallel or follow-up activities included in the Phase 2 plan and plans to follow.

The Platform on Growth and Employment will implement activities to build awareness and train staff in ICT through using the case e-learning techniques and in dissemination using e-learning pedagogies as a case. These activities will be carried out across the four south partner universities and in collaboration with the other thematic platforms in BSU, in particular the Environment and Climate Platform (Ghana and Tanzania) and the Platform on Human Health (Ghana) as agreed with the south partners. At all partner universities, these generic activities will be complemented by pilots to redesign existing courses into e-learning and testing and developing of means and ways to use ICT in general for research communication, dissemination and networking. Specific attention will be given to ensure that the skills gained through working with e-learning are seen in a wider perspective of institutional capacity within research communication, dissemination and networking.

Under the Platform on Stability, Democracy and Rights Tribhuvan University has developed an e-Learning strategy, which focuses on introducing both blended learning and online modules aiming at improving the quality of education at the university and linking the high number of campuses across the country and central Tribhuvan University closer together. During Phase 1, a fact-finding mission at TU has already taken place, which will form the foundation for implementing e-learning activities at Tribhuvan University.

### **5.3 Problem-Based Learning (PBL)**

Education at most African universities is based on a text book oriented theoretical teaching style. This tradition has implications for the way research communication, dissemination and networking is approached. Introducing Problem-based learning (PBL) as a heading for a more empirical and experiential learning paradigm have in many countries proved to be a very powerful tool in dismantling the 'Ivory Tower' mentality of universities. A shift in learning paradigm tend not only to change the way students are taught and the way they learn, but also the way the faculty staff perceive themselves and their role in education and involvement with society.

PBL is seen as an effective way of increasing collaboration between universities, university students and the sectors outside universities as the problems to be addressed by students and researchers take a starting point in commonly defined problems. This facilitates later communication and university engagement in challenges faced by the civil society or private and public sectors.

Denmark has unique and internationally recognised competences within the use of PBL in higher education. It is therefore a good match of south priorities and Danish core capacities to include PBL as one of the central approaches in the BSU collaboration that will contribute to improve institutional capacities and to identify, to analyse and to communicate findings to other stakeholders in the surrounding society.

The experience with PBL at the south partner universities is very limited. The planned activities will meet these challenges by mapping existing PBL-resources and PBL-experience that can be used when adapting PBL-approaches at institutional level.

In the next stage the planned activities vary slightly between the Platforms and institutions.

The Platform on Stability, Democracy and Rights will run interdisciplinary workshops to elaborate on PBL in order to motivate staff at south partner universities to use PBL in teaching. The workshop can be implemented across all four platforms, if relevant.

The Platform on Human Health foresees that PBL to some extent will be covered as an integrated element in other activities with a built-in focus on teaching methodology e.g. e-learning activities. However, to support the PBL dimension it is proposed that a smaller, specific investment is made for PBL introductions and basic training of selected staff at the PHH partner institutions and to assess the need for and develop follow-up activities.

At the Platform on Environment and Climate and the Platform on Growth and Employment the generic part will involve activities to map capacities and experience with PBL, to build awareness and train staff in PBL, including training of trainers. These activities will be carried out across the four south partner universities and in collaboration with the other thematic platforms in BSU, in particular the Platform on Human Health (Ghana). At each partner university pilot projects will be implemented, where selected courses will be redesigned to PBL. As mentioned, synergies between the e-learning theme and problem-based learning will be explored in the implementation of the pilot activities.

## **6. Joint activities: Challenges and practical approach**

It has been a priority from the outset to utilise the potential for joint activities within this grant, as it is for the BSU overall. Besides, experience from Phase 1 show that there is a substantial interest from the south partners to participate in joint South-South activities within or across the platforms, thereby strengthening the South-South and South-South-North networks between universities.

There are obvious potentials for joint activities since the thematic areas and many of the needs are the same and three of the platforms share partner institutions in the south. However, some challenges to the approach include:

- Balancing generic approaches with thematically and contextually relevant approaches: Although the general needs to a large extent may be common for the south partners the specific contexts differ and thereby generic elements often need to be tailored to the specific partners
- Timing may in some cases become an issue since some partners have initiated activities and processes during Phase 1 similar to the proposed ones
- Coordination: It is a complex task to optimize the process of organizing teams of experts to undertake needs assessments, to coordinate the development of generic materials and subsequently plan and implement training activities adapted to the partners across the platforms
- Since the four platforms each have their own budget and Letters of Agreement with each of their south partners, who again have their own budget and project administration, the pooling of budgets for joint activities has some administrative complications, both for the Danish platform management and for the partner institutions in the south, including in the areas of budget responsibility and audit.

The DKUNI project coordinator and the platform chairpersons and coordinators have worked on how best to deal with these challenges and will come up with a proposed model to facilitate joint planning and implementation across platforms and institutions in the south. In the process resource persons with specific experience in financial project management and controlling will be consulted. The steering committees of the different platforms will discuss and decide how the specific platform will engage in joint implementation.

In the first stage, joint activities across all four platforms will take place with cost sharing. This will include the assigning of a preliminary team who will assist in creating an overview of identical activities across platforms and partner institutions and outline opportunities and a possible set-up for collaboration in greater details.

Based on these findings tenders will be announced on specific crosscutting assignments via Platform Newsletters and other relevant media to ensure that all competent resource persons are targeted. It is foreseen that the scope of most common assignments will require a team of resource persons. This procedure should ensure mobilizing competent resources with the ability to complete the activities successfully and hopefully reduce overall transaction costs.

The lessons learnt from these arrangements will be taken into consideration in the planning of cross platform collaboration in Phase 2. Likewise, a number of the activities will be closely coordinated with already on-going activities in Phase 1 and planned activities in Phase 2.

Below is a preliminary list of planned joint activities. The list is tentative as the planning process is still in progress.

#### Activities across several BSU platforms

<b>Immediate Objective:</b>				
<b>1</b>	<b>BSU south partner universities' institutional capacities in knowledge sharing, research dissemination and communication strengthened</b>			
<b>no.</b>	<b>Outputs:</b>	<b>no.</b>	<b>Activities</b>	<b>Indicators</b>
1.1	Current activities and capacities within knowledge sharing, research dissemination and communication at the south partner universities mapped	1.1.1	Developing a joint format for mapping of capacities within knowledge sharing, research dissemination and communication	A joint format developed
		1.1.2	Mapping of capacity	Capacity mapped and documented
		1.1.3	Workshop on how to follow up on the lessons learned from the capacity mapping exercise	Workshop implemented
1.2	Capacities in developing policy briefs strengthened	1.2.1	Organising scientific communication writeshop	Scientific communication writeshop implemented
		1.2.2	Developing formats for policy briefs and institutional support functions	Formats and support functions developed
		1.2.3	Policy brief writeshops	Writeshops implemented
1.3	Academic English communication skills strengthened	1.3.1	Academic English writing workshops	Writeshops implemented

<b>Immediate Objective:</b>				
<b>2 BSU south partner universities' institutional capacities in e-learning strengthened</b>				
<b>no.</b>	<b>Outputs</b>	<b>no.</b>	<b>Activities</b>	<b>Indicators</b>
2.1	A comprehensive needs assessment of e-learning capacities and experience at south partner universities implemented and strategies developed	2.1.1	Developing a joint format for needs assessment/resource mapping within e-learning	A joint format developed
		2.1.2	Conducting e-learning needs assessment/ resource mapping	Needs assessment documents available for each participating south institution
		2.1.3	Developing e-learning strategy	# e-learning strategies developed and shared
		2.1.4	Experience-sharing workshop based on on-going E-learning programme at Maseno University for all BSU partners	1 workshop conducted
2.2	Awareness raised and staff of south partner universities trained in E-learning techniques and pedagogies	2.2.1	Developing and implementing awareness workshop on e-learning one per country	# workshops conducted with 25 participants per workshop
		2.2.2	Developing and implementing training courses in E-learning techniques and pedagogies. 3 different levels according to institutional needs: basic, intermediate and experienced	# courses conducted according to needs and capacities
2.3	Selected MSc or PhD courses at the south partner universities redesigned to E-learning and pilot tested	2.3.1	Selecting and implementing pilot courses for e-learning	At least 1 pilot course at participating institutions
		2.3.2	Sharing of experience (S-S-N) from pilot courses across partners and platforms	Workshop report
<b>Immediate Objective:</b>				
<b>3 BSU south partner universities' institutional capacities in Problem Based Learning (PBL) strengthened</b>				
<b>no.</b>	<b>Outputs:</b>	<b>no.</b>	<b>Activities</b>	<b>Indicators</b>
3.1	PBL experience and competencies at south partner Universities mapped and analysed	3.1.1	Developing a joint format for mapping of PBL experience and competencies at South partner universities	Joint format documented
		3.1.2	Mapping of southern universities with PBL experience and competencies	Reports on PBL experience and competences available for participating universities

3.2	Awareness raised and staff of south partner universities trained in PBL principles and methods	3.2.1	Developing and implementing PBL awareness workshop	# workshops conducted with 25 participants per workshop
		3.2.2	Developing and implementing PBL training course	# courses conducted with 25 participants/course

# = number that will be finalized along with detailed activity plans, based on number of south partners involved in a given activity

Most activities are expected to be implemented in cooperation between partner institutions from several or all platforms. Platform-specific activities will be implemented by the involved partner institutions.

## 7. Budget overview

### Distribution of funds

Overall, funds are distributed 45/55 between north and south as agreed with Danida. Across south partner universities, it has been aimed at a near-equal distribution, but taking into due consideration the absorbing capacity of the respective south partner universities, possibilities for synergy with e.g. FFU projects and specific needs. The distribution across partners is tentative and may be adjusted during the detailed planning of activities.

### Budgets per immediate objectives.

#### Budget - Total Project. DKK.

	Danish universities	South partner universities	Total
Knowledge sharing, research dissemination and communication	3,523,854	4,714,117	<b>8,237,971</b>
E-learning	2,093,333	2,901,673	<b>4,995,006</b>
Problem-Based Learning	1,411,771	1,977,901	<b>3,389,672</b>
<b>Total</b>	<b>7,028,958</b>	<b>9,593,691</b>	<b>16,622,649</b>
External audit	60,000	225,000	<b>285,000</b>
Administration fee	1,405,792	671,558	<b>2,077,350</b>
<b>Grand total</b>	<b>8,494,750</b>	<b>10,490,249</b>	<b>18,984,999</b>
Share %	45%	55%	100%

**Budget - Platform on Environment and Climate. DKK.**

	Danish uni- versities	KNUST	UG	UDSM	SUA	Total
Knowledge sharing, research dissemination and communication	979,688	356,600	273,072	356,600	356,600	<b>2,322,561</b>
E-learning	281,250	128,505	0	128,505	128,505	<b>666,764</b>
Problem-Based Learning	492,188	115,654	327,687	115,654	115,654	<b>1,166,837</b>
<b>Total</b>	<b>1,753,125</b>	<b>600,759</b>	<b>600,759</b>	<b>600,759</b>	<b>600,759</b>	<b>4,156,162</b>
External audit	15,000	15,000	15,000	15,000	15,000	<b>75,000</b>
Administration fee	350,625	42,053	42,053	42,053	42,053	<b>518,838</b>
<b>Grand total</b>	<b>2,118,750</b>	<b>657,813</b>	<b>657,813</b>	<b>657,813</b>	<b>657,813</b>	<b>4,750,000</b>
Share %	45%	14%	14%	14%	14%	100%

**Budget - Growth and Employment Platform. DKK.**

	Danish uni- versities	KNUST	UG	UDSM	SUA	Total
Knowledge sharing, research dissemination and communication	697,500	239,019	239,019	239,019	239,019	<b>1,653,575</b>
E-learning	562,500	192,757	192,757	192,757	192,757	<b>1,333,528</b>
Problem-Based Learning	487,500	167,056	167,056	167,056	167,056	<b>1,155,724</b>
<b>Total</b>	<b>1,747,500</b>	<b>598,832</b>	<b>598,832</b>	<b>598,832</b>	<b>598,832</b>	<b>4,142,827</b>
External audit	15,000	15,000	15,000	15,000	15,000	<b>75,000</b>
Administration fee	349,500	41,918	41,918	41,918	41,918	<b>517,173</b>
<b>Grand total</b>	<b>2,112,000</b>	<b>655,750</b>	<b>655,750</b>	<b>655,750</b>	<b>655,750</b>	<b>4,735,000</b>
Share %	45%	14%	14%	14%	14%	100%

**Budget – Platform on Human Health. DKK.**

	Danish uni- versities	KNUST	UG	KCMC/ NIMR	SUZA/ ZCHS	Total
Knowledge sharing, research dissemination and communication	1,000,000	350,000	350,000	430,000	260,000	<b>2,390,000</b>
E-learning	660,000	225,000	225,000	312,000	151,757	<b>1,573,757</b>
Problem-Based Learning	80,000	30,000	30,000	34,000	20,000	<b>194,000</b>
<b>Total</b>	<b>1,740,000</b>	<b>605,000</b>	<b>605,000</b>	<b>776,000</b>	<b>431,757</b>	<b>4,157,757</b>
External audit	15,000	15,000	15,000	15,000	15,000	<b>75,000</b>
Administration fee	348,000	42,350	42,350	54,320	30,223	<b>517,243</b>
<b>Grand total</b>	<b>2,103,000</b>	<b>662,350</b>	<b>662,350</b>	<b>845,320</b>	<b>476,980</b>	<b>4,750,000</b>
Share %	44%	14%	14%	18%	10%	100%

**Budget – Platform on Stability, Democracy and Rights. DKK.**

	Danish uni- versities	Maseno University	Tribhuvan University	Gulu Uni- versity	<b>Total</b>
Knowledge sharing, research dissemination and communication	846,666	425,991	369,916	229,262	<b>1,871,835</b>
E-learning	589,583	231,953	386,159	213,262	<b>1,420,957</b>
Problem-Based Learning	352,083	161,215	198,598	161,215	<b>873,111</b>
<b>Total</b>	<b>1,788,333</b>	<b>819,159</b>	<b>954,673</b>	<b>603,738</b>	<b>4,165,903</b>
External audit	15,000	15,000	15,000	15,000	<b>60,000</b>
Administration fee	357,667	57,341	66,827	42,262	<b>524,096</b>
<b>Grand total</b>	<b>2,160,999</b>	<b>891,500</b>	<b>1,036,500</b>	<b>661,000</b>	<b>4,749,999</b>
Share %	45%	19%	22%	14%	100%

**8. Risks and assumptions**

Political and social stability is an issue in countries with high economic inequality and this impacts on universities in various ways and to varying degrees across BSU partner countries and institutions. PSDR has fragile states as a thematic priority and it has therefore been important to include fragile states among its partner countries in spite of the added difficulties that this necessarily implies.

Nepal is still in a post-conflict scenario, and the difficulties at arriving at a consensus concerning the new constitution are still affecting life in Nepal in general, including university life. There are regular general strikes in Nepal, which close down all activities, including the universities. It is assumed that the activities can be implemented while managing these challenges, as has been the case in Phase 1.

In Kenya, in the years since the election in 2007 a new Constitution has been passed and political stability has been regained - at least on the surface. However, as 2013 is an election year in Kenya there is a risk that political turmoil, riots, etc. could surface again. This can affect the implementation of activities at Maseno University. Still, it is not expected that implementation of activities at Maseno University will be seriously affected even if moderate post-elections conflicts may arise during 2013.

Other general assumptions for the successful implementation of the proposed activities:

- University policies/senior management at south partner universities remain favourable and committed towards research dissemination and communication, e-learning and Problem-Based Learning
- Senior university management and university policies, including reward and incentive schemes, at partner universities in Denmark and in the south are supportive towards the proposed activities

- Interest of key persons to organize and initiate activities within the proposed areas is sustained
- Efficient and effective collaboration and coordination among platform partners and between platforms is maintained
- It is assumed that no major, long-lasting strikes or similar mass action among students or particular cadres of staff at partner universities occurs.

The Concept Notes developed across all four platforms on the thematic focal areas identify a number of specific challenges and areas that need special attention, some of which can be addressed directly in the activities.

With regards to both communication, e-learning and PBL a main obstacle relates to the infrastructure (interruptions of power supply, limited access to internet, limited IT facilities, and limited access to e-resources) at south partner universities. Through limited support to development of IT infrastructure and access to e-resources, these risks will be sought minimised. It is assumed that the south partner universities themselves and likeminded donors will give priority to supporting IT infrastructure to implement these activities.

The above-mentioned risks and assumptions echo those of Phase 1, but building on the experience of Phase 1 none of them are expected to seriously affect the implementation of the proposed activities.

## Annex - Thematic Focal Areas

Concept papers on the prioritised thematic focal areas were developed during and immediately after the workshop. Below, extracts from the concept notes with key characteristics and challenges for the thematic areas are presented.

Based on the concept notes each platform has identified a number of activities for each south partner and for joint or cross-platform activities.

### 1. Knowledge Sharing, Research Dissemination and Communication

*At the August 2012 Workshop 'Knowledge Sharing, Research Dissemination and Communication' was not dealt with as a separate thematic area. Instead, the subject was covered by two separate themes, listed below. After the workshop and as a result of the dialogue with the Ministry of Foreign Affairs, the two original thematic areas were merged into the new focal area with emphasis on dissemination and communication of research findings and results. Below, extracts from the two original workshop concept notes are presented.*

#### 1.1 Research Dissemination and Outreach

As institutions for research and research-based education, Universities can become more meaningful to the society/communities, donors, taxpayers development agents if they reach out to stakeholders with intention of improving livelihoods, promoting wise environmental management practices and catalysing local innovation processes. There is a great need for universities to cooperate in developing and improving the quality of our institutions in this domain.

##### **Definition/boundaries**

The term outreach is used in many public sectors and has been defined as:

- systematic efforts to provide unsolicited and predefined help to groups or individuals deemed to need it, or
- to provide services beyond conventional limits as for example to particular segments of a community.

For the purposes of the BSU program, outreach can be defined as “investing university staff and resources in support of the surrounding communities and industries in meeting their challenges and improving their livelihoods and performance”.

In practice, outreach is often narrowly conceived as some activities a scientist does after his/her scientific discoveries in a perspective of “communication and dissemination of findings”. This definition reflects the external position of outreach to scientists in universities. However, if research is for improvement of people’s livelihood, then outreach should be an integral part of research, as for example it is the case in action research approaches

##### **Brief analysis of challenges:**

There is an increasing demand towards universities to provide outreach from their scientific-based research and teaching activities. With limited resources available, conducting of outreach has become almost like an “externality” to universities and scientists. The opportunity costs for scientists to put their efforts and time into outreach activities, instead of doing his/her novel

science, are often high; most outreach programs are underfunded, and the incentive structures of universities are biased toward scientific outputs in peer reviewed journals/books and others, and less so in outreach.

There are several known good approaches to outreach applied in various universities in the BSU family both in the North and in the South. The following are examples of training approaches that may significantly support outreach in universities: (1) problem-based learning (2) action research (3) participatory research methods etc. Also the introduction of e-learning could go in a long way in support outreach for many beneficiaries. There are excellent examples of successes from these approaches.

**Special areas of concern that needs attention:**

1. Coverage – how we can involve stakeholders in this process

We need to make sure that the framework for pulling out lessons learned and presentation/discussions of cases is included in various outreach undertaking (workshops/seminars/ other various approaches to reach out).

## 1.2. Research Networks and Communication

**Definition/boundaries:**

- A collaboration of multiple researchers and research institutions with common goals with at least a minimal governance and communication structure and some shared programs

Forms of Networks:

- There should be several networks defined around specific topics or societal problems, each with interest in research about a particular condition or group of people.
- Networks may be defined around platform-specific issues or across platforms.
- Different networks should be able to work and complement each other by addressing specific themes from different perspectives

**Brief analysis of challenges**

1. Little is known by members of what is going on in other institutions, especially across the South partner institutions. Increased knowledge-sharing could help in complementing and furthering on-going research.

Possible solutions:

- Use BSU website to put information of what is on-going at partner institutions
- Conduct seminars/conferences – among young researchers within the institutions, and S-S partners which are moderated by senior researchers
- Enhance S-S collaboration within the networks and platforms

2. Access and sharing of resources (both human and physical) is insufficient.

Possible solutions:

- Web-based inventory of available resources across the partner institutions
- Exchange programs for faculty members, and young researchers

- E-based resources: BSU website will provide information of what is published by the members of the BSU and information on available data sources
- Librarians within the partner institutions should be enabled to facilitate access of scientific literature to all partners

3. Suboptimum research and communication infrastructure in the partner institutions.

Possible solutions:

- Support to infrastructure upgrade (or means to support attracting such funding)
- Sharing of facilities within the network (and means to support such sharing)

4. BSU provides limited funding for South-based research, e.g. PhD grants and small-scale pre-PhD research. Larger collaborate research projects cannot be funded by BSU.

Possible solutions:

- BSU should facilitate access to other funding sources, e.g. by supporting proposal writing.

**Special areas of concern that needs attention**

- Kick-off meetings of each network to mingle all players into the network and ensure leadership
- Make sure that there are competent and enthusiastic researchers to lead the network
- Incentives to staff members, researchers, and supportive staff
- Avail funds to seniors for pilot projects which will involve postgraduate students
- Avail funds for cross-cutting research projects (across the platforms) and call for participation of interested BSU partners
- Make sure that the governance of the BSU platforms allow prioritization of cross-university networks.

## 2. E-learning

### **Definition of e-learning**

*"Teaching and learning activities mediated by Information and Communication Technology"*<sup>2</sup>

### **Boundaries/focus in BSU**

- Blended learning (e-learning elements mixed with conventional teaching), and
- Distance education (pure distance education)

### **Brief analysis of challenges**

Framework on challenges for e-learning<sup>34</sup>

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<sup>2</sup> Source: Dohn, N., Larsen, S., Thorsen, M. (2012, in press): **E-learning**. In: Rienecker, L., Dolin, P., Stray, P., Wichmann-Hansen, G.: University Teaching. Samfundslitteratur, Copenhagen

<sup>3</sup> Source: Anderson, A., Grönlund, Å. (2009): A conceptual framework for e-learning in developing countries: A critical review of research challenges. EJISDC Vol. 38 ([link](#))

Individual challenges	Course challenges
<p>Student:</p> <ol style="list-style-type: none"> <li>1. Motivation</li> <li>2. Conflicting priorities</li> <li>3. Economy</li> <li>4. Academic confidence</li> <li>5. <b>Technological confidence</b></li> <li>6. Social support (from home/employees)</li> <li>7. Gender</li> <li>8. Age</li> </ol> <p>Teacher:</p> <ol style="list-style-type: none"> <li>9. <b>Technological confidence</b></li> <li>10. Motivation and commitment</li> <li>11. <b>Qualification and competences</b></li> <li>12. Time</li> </ol>	<p>Course design:</p> <ol style="list-style-type: none"> <li>13. <b>Curriculum</b></li> <li>14. <b>Pedagogical model</b></li> <li>15. <b>Subject content</b></li> <li>16. <b>Teaching and Learning Activities</b></li> <li>17. <b>Localization (culture/language/religion)</b></li> <li>18. <b>Flexibility (mode of delivery)</b></li> </ol> <p>Support provided:</p> <ol style="list-style-type: none"> <li>19. <b>Student support</b></li> <li>20. <b>Faculty support (staff/teachers)</b></li> </ol>
Contextual challenges	Technical challenges
<p>Organisational:</p> <ol style="list-style-type: none"> <li>21. Knowledge management (e-learning unit)</li> <li>22. Economy and funding</li> <li>23. Training of teachers and staff</li> </ol> <p>Cultural:</p> <ol style="list-style-type: none"> <li>24. Role of teachers and students</li> <li>25. Attitude towards e-learning</li> <li>26. Rules, regulation, <b>copyright</b></li> </ol>	<ol style="list-style-type: none"> <li>27. Access</li> <li>28. Cost</li> <li>29. Software and interface design</li> <li>30. Localization (culture/language/religion)</li> </ol>

Highlighted challenges (bold text) were mentioned as of specific relevance by the working group.

### Special areas of concern that needs attention

Assumptions:

- Access to a PC with connection to the internet
- Use a voluntarily approach for implementation. Successes are usually made by dedicated people with a personal drive.
- Allow experimentation. E-learning is not “one size fits all solution”. New solutions need to be developed with respect to the specific teaching context and specific challenges.
- Focus on “learning” and not the “e” (technology). Pedagogy is the central element in quality e-learning. Be sure that you have a clear rationale for introducing technology.
- Think in differentiated solutions. Different universities, or faculties, have different pull and push drivers, e.g. too many or too few students. Moreover, it is important to recog-

<sup>4</sup> Source: Rasmussen, P.S., Rytönen, M. (2010): E - learning capacity at the East African STRAPA universities - Pre - appraisal on a e - learning project ([link](#))

nise that different target groups have different demands. Master students and continuing education students does not have the same demands

### 3. Problem-Based Learning

#### **Definition/boundaries**

Problem-Based Learning (PBL) is learning by trying to solve a real-life problem that motivates a learner to find a workable solution.

PBL focuses on a problem situated in a local context and may be defined through the following set of characteristics:

- Learner-based
- Student-driven
- Peer-based (students teach students)
- Collaborative learning
- Can be multidisciplinary
- Can be organized as team-based project work

PBL has been shown to be an effective way of generating knowledge in and for problem-solving, and the approach thus forms an important basis for knowledge dissemination. This is possible through various modes, depending on whether the focus is on knowledge dissemination to university students or to the general public. If knowledge dissemination to university students is the primary concern, PBL may ideally be linked to e-learning in blended learning courses. If, on the other hand, dissemination of knowledge is targeted at the general public in outreach projects, other modes of knowledge transfer such as public engagement in extra-mural activities may be more suitable. However, regardless of the mediation channels selected for dissemination of knowledge, PBL occupies a core function in the construction of knowledge.

#### **Brief analysis of challenges**

For PBL to be effective, the student to faculty ratio has to be low. This clash with the reality of high numbers of students in courses. In the context of the South, a problem is that sometimes, learning does not take place when there is a heavy reliance on lecture notes as is seen in situations when there is a high student to faculty ratio. The problem of wholly relying on lectures and little by way of PBL, combined with the lack of knowledge of good research methodology often seen at undergraduate and master's levels, makes it difficult to design good research proposals and projects at all levels from BA through Master's to PhD level. PBL might help to remedy this, but a PBL approach needs to be addressed as a specific problem relating to a social issue, and to be placed in the thematic context of the relevant platform.

A further challenge is that there may be both institutional resistance and resistance among faculty to radical changes in teaching and learning models, and some incentives are needed for faculty to be prepared to switch to a teaching model that would require new work routines. A serious problem that has to be taken into account when introducing PBL is also the fact that most students in southern universities lack library facilities and have limited access to relevant literature. In addition, there seems to be a major challenge in ensuring that changes from more traditional learning approaches to a PBL approach are implemented in a sustainable way, and it

will therefore be necessary to assess to what extent courses using PBL generate better quality than courses using more traditional teaching methods. Finally, before implementing PBL as a BSU cross-cutting platform activity, attention should be paid to possible differences in educational structures in different regions, institutions and disciplines.

**Special areas of concern that need attention**

In carrying out the analysis of the merits/ demerits of PBL, we have rightly noted that PBL works where we have small numbers of students. Therefore in the context where we have large numbers of students, as is the case of many academic programmes in the South, PBL should ideally be combined with E-learning. In the planning process, note must be taken of which courses are more suitable for applying a PBL-approach.

PBL should be introduced gradually in selected courses (pilot projects) rather than in full programmes, to ensure a manageable implementation process. Introducing PBL will require a change of traditional mindsets and further training of teaching staff to guarantee a sufficient number of qualified supervisors. The supervisors should be prepared for the new tasks in training of teachers' projects as well as in training of trainers' workshops. Problems relating to lack of physical space for group work must be considered and the implementation of PBL must be aligned with the needs of each individual study programme. The implementation process must be monitored and assessed at the end of the implementation stage to pave the way for an iterative process.

END