



Letter of Interest Form
All applicants MUST use this form to apply

Development Innovation Ventures (DIV) identifies, tests, and supports innovative and cost-effective solutions to the world's most intractable development challenges. DIV holds a grant competition for innovative ideas, pilots and tests them using cutting-edge analytical methods, and scales solutions that demonstrate widespread impact and cost-effectiveness. If you have a great idea, please submit a Letter of Interest (LOI) to DIV using this form. **Citations should be provided whenever possible, and assumptions used to generate estimates should be clearly explained.** Please submit the final LOI to DIVApplications@usaid.gov. Once you submit a LOI, it will undergo a competitive review and if successful, we will ask you to submit a full application.

For additional information about DIV, examples of great projects that we support, and our application process and timeline, please visit DIV's website at <http://www.usaid.gov/div/>. **Please carefully review our [Annual Program Statement](#) available on our website before submitting your LOI.**

Please use 11 point Calibri font. **DIV may not review any material beyond nine pages; the nine page limit includes the instruction text as well as the information provided by the applicant.**

I. Eligibility Checklist

DIV welcomes applications from many types of organizations including foundations, U.S. and non-U.S. non-governmental organizations (NGOs), faith-based organizations, U.S. and non-U.S. private businesses, business and trade associations, international organizations, U.S. and non-U.S. colleges and universities (public and private), civic groups, regional organizations, etc.

DIV will only review applications from organizations that meet the following minimum requirements. Check all that apply:

- Applicant is a legally recognized organizational entity under applicable law.
- Applicant's proposed activities take place in the countries for which USAID provides assistance. If the project covers activities in other countries, the DIV grant can only be used for activities in USAID presence countries.
- Applicant must be an organization from, or with an operational focus in, a country that is not ineligible for assistance under the Foreign Assistance Act of 1961, as amended, or related appropriations acts.

II. Organization Information

A. Organization legal name: Université Lumière de Bujumbura

B. Organization type (please select from dropdown menu):
University, Technical Institute or College

If 'Other', please specify:

C. Organization address:

Street Address	Avenue de l'Agriculture, Mutanga Nord
City:	Bujumbura
State/Region:	Bujumbura
Zip/Postal Code:	1368
Country:	Burundi

D. Contact information:

Primary point of contact

Name: Mr. Pierre-Claver
RUTOMERA
Title: Professor
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Secondary point of contact

Name: Dr. Takeshi Utsumi
Title: CEO of GLOSAS/USA
Telephone: 1-718-939-0928
E-mail: takutsumi0@gmail.com

III. Overview Information

A. Project title: Creating Global Knowledge Centers Network (GKCN) with Global University System (GUS) in Burundi

B. DIV stage (please select from dropdown menu). Please refer to the Annual Program Statement (APS) for definitions of each stage. The stage should be selected based on project activities, not funding needs: 1

C. Total funding requested (USD): 100000

D. Proposed cost share (USD) (see the Annual Program Statement for definition):

E. Which of the following best describes the sector your solution addresses? (please select from dropdown menu): Education and Training

If 'Other', please specify: Other: Governance and Democracy

- F. Secondary sector, if any (please select from dropdown menu): Other
If 'Other', please specify: Energy, Water, Environment, Agriculture
- G. Partner organizations: See Section IV-E for entire list
- H. Primary country where the project will take place: Burundi
- I. Secondary country/countries (if any) where the project will take place: East African Countries
(EAC)
- J. Expected duration of project activities (months): 24
- K. Expected source of financial support at scale (long-term widespread implementation):
Hybrid of commercial and government/donor support
- L. Has the applicant ever received USAID funding in the past? No
- M. Has the applicant received USG funding for this or a similar project? No
- N. Has the applicant received DIV funding for this or a similar project? No
If 'Yes', please provide the grant number:
- O. How did you initially hear about DIV? Other (please specify)
If 'Other', please specify: Chairman of GLOSAS/USA

IV. Project Information

DIV recommends that applicants provide about half a page of text for each section A – E (excluding the instructions). However, applicants may determine the length of each section as long as the full Letter of Interest (including instructions) does not exceed nine pages. **Please thoroughly review the [Annual Program Statement](#) before answering the following question.**

A. Development Challenge, Your Innovation, and Anticipated Impacts

Challenge: What development challenge are you addressing?
ACADEMIC BRAIN DRAIN PROBLEM AND HOW TO RETAIN IT.

Brain drain or human capital flight is the emigration of trained and skilled individuals (human capital) to other countries or nations. In the academic context, it refers to the emigration of professors or education personnel in search of greener pastures. Brain Drain is therefore a potentially serious barrier to economic growth, development and poverty reduction in African countries. Many universities in Africa have scarcity of high-qualified academic staff to undertake research and provide quality teaching. African countries are funding the education of their

nationals only to see them end up contributing to the growth of developed countries with little or no return on their investment.

The first report is that class rooms and campuses are saturated whereas a lot of people don't have access to higher education (the rate of access in higher education in Burundi is 0,1% only). The country doesn't have financial budget to construct a lot of campuses in order to satisfy all demands.

The second report is that there are a lot of people who work in enterprises or public servants who don't have a degree or that would like to have another qualification for good to get ready to the professional reconversion.

The solution is therefore to help them to work and to study at the same time.

Two challenges are to raise in a lot of African countries: the flight of the brains in general, the academic brain drain in particular and the weak rate of access to the higher education.

Concerning the phenomenon of academic brain drain, no one can stop it because it is due to several reasons notably poverty, country political situation,...

But there are ways to mobilize the Burundian diaspora through Distance teaching and elearning to contribute in the development of their country of origin without leaving their countries of welcome.

In my country Burundi, the rate of access to the higher education is less than 0.1% whereas the minimum rate required by the UNESCO is of 25%.

How will Burundi develop itself or fight against poverty with a population without qualification? The distance teaching and elearning are one of the solutions to increase this rate of access to the higher education.

Innovation: What solution are you proposing?

Introducing a GLOBAL KNOWLEDGE CENTERS NETWORK - BURUNDI (GKCN-BI) that will provide an adequate setting to the development of ICT used in higher education and the integration of higher education institutions of Burundi in the networks of education and research of East African countries and the world.

According to UNESCO, "Sub Saharan African countries face up of lack of 1.159 million of teachers by 2015. But if we take in account the departures (retirements, resignations and death) these will be more of 2.3 million of teachers that will be necessary to recruit. However, the countries don't have still the financial capacities to sustain this recruitment. "

That's why, to intervene in the acquirement of ICT basis infrastructures will be a good way to replace the deficit in academic human capital while developing distance teaching and learning: a very important innovation in higher education system in Burundi in particular and in East Africa region in general.

The GKCN-BI will be part of the GKCN (which is now being organized in global scale by our US partners, e.g., GLOSAS/USA, Stevens Institute of Technology, Millennium Institute, etc.) and other partners as African Virtual University (AVU). This can then be an effective planning tool for different players at different levels of operation locally and abroad. It can also serve as a training tool for planners. This new concept of Distance teaching and learning needs to be introduced to key players in Burundi including our academic partners. Therefore, training and planning workshop will be appropriate first step to develop GKCN-BI that will involve countries in East and Central Africa, particularly along the Nile River basin countries, since we share resources and common challenges.

By introducing GKCN-BI we shall be embedded in a global system; learning from peers hence ensuring reliability and cost effectiveness for participating countries and entities, especially for sustainable development strategies and handling various challenges issues.

On the other hand, since 2013, Burundi is connected to fiber optic network. With this Internet bandwidth in the country, distance teaching and learning will be a solution to the problem of brain drain because Burundian diaspora will be able to teach without move from their countries of welcome. Therefore distance teaching and learning will be a factor of economic growth, development and poverty reduction. Finally, brain drain will become a gain drain for Burundi.

Impact: What impact do you expect your innovation to have on this development challenge? How will it significantly impact the development challenge in a way that has not been feasible before?

By introducing Global Knowledge Center Network – Burundi (GKCN-BI) as part of a global network, we are expecting to get efficient and positive impact on the short and long term for development change on rate of access to higher education in Burundi and other countries of East African Community (EAC). The implementation of ICT infrastructures for distance teaching and learning in Higher Educational Institutions will permit:

- to increase rate of access to higher education and allow a high number of students in universities in East African countries;
- to reduce expenses in higher education on a long term.
- to reinforce capacities of local academic human resources;
- to introduce new academic fields and new degree level because it will facilitate access to some studies that don't exist locally.

In addition, it will bring to Burundian higher educational Institutions:

- a solution to the problem of flight of brains because the expatriate Burundian teachers will be able to teach without move from their countries of welcome ;
- a better access to a higher education quality because access to the abundant and recent educational resources through the numerical libraries of developed universities.

The GKCN-BI will assist higher education leaders in EAC to make informed and rational decisions based on scientific support systems. It will create an environment for regional leaders to share experience and good practices from peers. The training facility will provide the necessary skills at different levels from management of distance and Online learning to simulation and negotiation skills.

With the system in place, it should help in success rate of access to higher education. The planners and academic leaders at different levels can also be part of the system by feeding it relevant data and develop confidence in the e-learning method.

Context and Previous Experiences: Describe how your solution is relevant to the country or countries' context. Describe previous experiences implementing or testing the solution and any evidence of successful development impact. Answer required for Stage 2 and Stage 3 applicants. In 2004, a center of distance teaching named African Virtual University Center (AVU Center) has been created at Light University of Bujumbura. This center was in network with 10 other French-speaking universities of West Africa and dispensed the program of bachelor in Computer Science of Université Laval of Canada.

The management of this network is coordinated by African Virtual University based in NAIROBI. The Inter Universities Council of East Africa (IUCEA) is our regional partner in Distance and online learning.

Locally, the center was piloted by a committee of 5 members (The Legal Representative of Light University, the Rector, the Dean of Academic affairs, the administrative and financial Director and the Director of the center).

Daily, the management of the AVU Center was assured by the Director assisted by an administrative assistant and a System Administrator and IT manager.

The results were very satisfactory because the student having had the best note of the network was at AVU Center UVA of Bujumbura and among the 5 better results, 3 were students from Light University.

Use of Funds: How will you use DIV funding?

(1) Organization of the planning workshop, (2) Seminar on system dynamics modeling, (3) Construction of Burundi national socio-economic, energy, environmental simulation models, (4) Interlinkage of those models with corresponding ones in various countries with the use of GLOSAS/USA patent pending procedures. (5) Planning for global e-learning, (6) Planning for global and local healthcare and agriculture, etc.

Anticipated results: What do you anticipate achieving with DIV funds?

Capacity building of higher education officials and young aspiring leaders with simulator/trainer with real-time data, promotion of e-learning, telemedicine and global health and a real development of ICT applications in East African region.

B. Target Beneficiaries and Potential to Scale

Provide the most appropriate estimate of who the solution will directly and indirectly affect.

Definition of direct beneficiary:

- 1) Political leaders,
- 2) Senior and junior level government officials,
- 3) Academic officials and planners and decision makers,
- 4) Civil servants of enterprises who had not had luck to have access to higher education;
- 5) Civil servants or unemployed persons who would like to have several qualifications;
- 6) People who want to change profession (professional reconversion),
- 7) Pupils after secondary schools.
- 8) Private corporation,

Definition of indirect beneficiary: Aspiring future leaders, university students and startup entrepreneurs. Developed countries for reducing the breeding ground on economic emigrants.

Scaling: What are possible avenues for scale up (e.g. public sector, international donors, private sector commercialization, or a combination) over the next 3 – 10 years, and what are your plans to get there?

We envisage Burundi and East African countries will form multidisciplinary team for mutual co-assistance to ensure sustainability, education sector, food security, energy, water, health care and environment. The governments and the international community who have been our development partners shall support this novel approach since they always support efforts to improve human life. The private community may pick it up as a business opportunity.

How many people do you expect to reach, both in the country described above and globally? Please explain how you calculated these estimates, including statistics and assumptions if relevant.

Since there have never been similar projects before anywhere, except for seminars on system dynamics conducted by the Millennium Institute in Dhaka, Bangladesh and Abuja, Nigeria and elsewhere, find below a preliminary estimate of the size of the target audience:

	<u>Direct</u>	<u>Indirect</u>
Before DIV support		
In 1 year?	100	150
In 3 years?	200	400
In 5 years?	400	1000
In 10 years?	2000	5000

What are the characteristics of your target beneficiaries or customers (e.g. income groups or other demographics)?

Mid level decision makers and future decision makers.

C. Cost-Effectiveness and Competitive Landscape

Competitive Landscape: What are existing common practices or competing solutions that seek to address the same development challenge as your solution in the area you intend to operate and scale?

Global simulation models of socio-economic-energy-environmental systems with Burundi dimension should provide a better planning tool, as adding Burundi characteristics to it using local expertise.

Advantages of the Innovation: What makes your innovation more appealing than alternatives to beneficiaries and public and/or private sector stakeholders who could invest in scale-up? This will be an experiment which will start small but aim at big results. Since this will be conducted without government intervention, it will enjoy flexibility, accessibility and economy of time of learning from its mis-steps for some quick fixes wherever possible.

Cost Effectiveness: Please explain why your solution has the potential to yield greater impact per dollar than alternate ways of achieving the same development impacts. Provide estimates of impact per dollar for your solution and alternatives if possible.

The GKC-Burundi being part of a global GKC dynamic simulation and training tool will promote long-term national development planning. It will allow users to identify the set of policies that lead towards a desired goal. This insight deepens understanding of critical development challenges. The solution will be extended as an academic experiment to test implementation of appropriate solutions for the less privileged groups of the society.

D. Measuring Success

Approaches to evaluation will vary by solution. Specific evaluation standards apply to each funding stage.

Social Impact: How will you measure progress towards social impacts? What is your comparison group, if any?

- Workshop conducted, number of participants and profile of attendants.
- Seminars conducted and knowledge transfer effected and profile and numbers accessed
- Assessment of % of GKCN-Burundi model establishment.
- Assessment of GKCN-Burundi potential impact on young government leaders.
- Plans for being part of global e-learning
- Assesmnet of potential for e-health/telemedicine

Cost Effectiveness: How will you measure whether your solution has the potential to yield greater impact per dollar than alternative ways of achieving the same development impacts? Comparison between the experimental and control group.

Lessons Learned: How will you generate relevant lessons throughout implementation? How will your evaluation inform your scaling strategy?

There will be periodic data collection pertaining knowlledge gained, its application and change of attitude on the experimental group. Participants will be requested to provide their views of the project on periodic basis. The information collected will be used to establish the way forward.

Please describe any plans to track your beneficiaries or customers' characteristics (as described in Section B, e.g. income group).

The main characteristic of our target group will be peasantry with their families and dependants.

E. Project Team

Lead Organization Briefly describe the lead implementing organization, including relevant experience.

Light University of Bujumbura is a private university created in 2000 and organizes teachings of bachelors and masters degree in 9 faculties and 3 d institutes on 3 campuses.

Currently, it counts more than 4,000 students like follows: 51% are of women and 49% of men.

It's main objectives are:

- To contribute to resolution of the problems of saturation of the academic teaching and unsuitability between the requirements of the job market while adapting the formation to the environment and to the needs of the society;
- To dispense, in innovative domains oriented toward the development and open to the creativeness, a high-level academic formation, centered on the knowledge, the know-how, the integrity, the responsibility and the individual's engagement,;
- To form some settings academically and professionally competent, not only claimants of employment, but also and especially creative of use and innovative projects.

Operational strategies, with regard to the philosophy of teaching, have been adopted to reach the fixed objectives. It is about notably of:

- a program aiming the integration of ICT and competitiveness
- a framing and an equipment educational oriented toward ICT for teaching

Light University of Bujumbura wants to be the focal point of ICT for teaching and their popularization within the society of East African Community. The formation in this domain has for objective to produce the competent professional settings that will act as interface between the actors of lasting development and the beneficiary population of this development.

Light University of Bujumbura signed Memorandum of understanding with several academic institutions as the Association of French-speaking Universities (AUF), Inter Universities Council of East Africa (IUCEA), African Virtual University (AVU),...

Project Team Describe the composition of the project team including key personnel, discussing the skills and experience they contribute to the proposed objectives.

- 1) Canon Paul NTUKAMAZINA, Legal Representative and President of Light University;
- 2) Pierre Claver RUTOMERA, Project team leader, is Project Manager, Integration of ICT in teaching, Distance and online learning. He is a former MP and, has been president of the Education and youth Committee at the National Assembly of Burundi during eight years. He has a long experience in managing projects in the field of education. He was the academic manager during 9 years at the Light University of Bujumbura, has good inter-personal relationship
- 3) Hamisi HAMISI, System Administrator , managing IT equipments.
- 4) Emile NDORICIMPA, Responsible of Public relationship and Communication.
- 5) Jacqueline NIRAGIRA, Administrative Assistant.

The whole personal the academic service of Light University will actively participate in the implementation of the present project in collaboration with the project team.

Partners Describe partner organizations (if any) and what skills and experience they contribute to implementing or scaling the project. Please distinguish between partners that have already agreed to participate and organizations (or types of organizations) that you will target.

- Baharicom Development Company <<http://tinyurl.com/3hrlp3>>,
- Center for International Conflict Resolution (CICR) of Columbia University <<http://tinyurl.com/67q444>>,
- Global Ring Network for Advanced Applications Development (GLORIAD) <<http://www.gloriad.org/>>,
- GLObal Systems Analysis and Simulation Association in the U.S.A. (GLOSAS/USA) <<http://www.friends-partners.org/GLOSAS/>>,
- Millennium Institute <<http://www.millennium-institute.org/>>,
- Stevens Institute of Technology <<http://www.stevens.edu/sit/>>
- Mayo Clinic <www.mayoclinic.org>

In addition to the above, current institutions with faculty members who are participating in Global Early Warning System (GEWS)/GUS development projects are numerous; as including the University of Tampere in Finland, UK Open University, University of Tennessee in Knoxville, Montana State University, Houston Community College, University of Hawaii, University of Michigan, Maui Community College, and many others. GUS (UNESCO program) will serve as an educational broker for universities, thus helping them gain international influence and access to students that they would otherwise not reach.

F. Citations Please list citations for above five sections below (only content written in the LOI will be reviewed as part of the application; these citations will be used to verify factual accuracy if necessary).

1. Utsumi, T., P. Tapio Varis, and W. R. Klemm (2003), "Creating Global University System (GUS)," <<http://tinyurl.com/sfgm7>>
2. Utsumi, T. (2012), "The Global Early Warning System (GEWS) with The Global University System (GUS): Their Use Within ECOWAS countries," <<http://preview.tinyurl.com/bmo9ljj>>
3. Utsumi, T. (2013), "The Global Knowledge Center Network (GKCN) with The Global University System (GUS)," <<http://tinyurl.com/o5l22ll>>
4. MDG (2010), "Japan Education Cooperation Policy 2011 -2015, Education for Human Security -- Building Human Capacity, Nations and World Peace through Educational Development," Executive Summary <<http://tinyurl.com/28zukro>>
5. MDG (2010), "Japan Global Health Policy 2011 -2015. EMBRACE - Ensure Mothers and Babies Regular Access to Care," Executive Summary <<http://tinyurl.com/26mfuf7>>
6. Dr. Utsumi, Initiator of globalization of Internet – see two comments in <<http://tinyurl.com/3mucrf2>> and <<http://tinyurl.com/lyysx>>
7. Dr. Utsumi's effort of deregulating the Japanese telecom policies for the use of email with the help from the Late US Commerce Secretary, Mr. Malcolm Baldrige <<http://tinyurl.com/m74zr2k>> and <<http://tinyurl.com/ml9m2m2>>

V. Submission

Please email your completed LOI in MS Word or compatible format to DIVApplications@usaid.gov. Please do not send more than one LOI per project or any additional attachments or information. Once you've submitted your LOI, you will receive a confirmation that we have received it. Your LOI will undergo a competitive review and if successful, we will ask you to submit a full application. Please carefully review our [Annual Program Statement](#) available at <http://www.usaid.gov/div/> before submitting your LOI.

By submitting this LOI, your organization is certifying that the answers to the questions are accurate to the full extent of your organization's knowledge.

Mr. Pierre-Claver RUTOMERA

25/03/2014

Name of authorized representative

Date

For additional information about DIV, examples of great projects that we support, and our application process and timelines, please visit our website at <http://www.usaid.gov/div/>.