



SDSN GREAT LAKES (SDSN GL)

SDSN-GL NEWSLETTER

04 November 2020
Volume 2 Number 1

Member Countries: Burundi, Democratic Republic of Congo, Republic of Congo, Rwanda, Tanzania

A Newsletter of the Sustainable Development Solutions Network in the Great Lakes. Published in Kigali, Rwanda

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A Greeting from the Network Chairman

Welcome to the second issue of the Network's Newsletter. I will use this channel to keep you, our stakeholders, updated on accomplishments of our Network member institutions, activities underway, and initiatives being planned.

We have had conferences bringing many people and perspectives together, individual research and publications and single-institution activities all raising awareness of sustainable development solutions and advancing our sub-region's collective progress towards meeting the 17 Sustainable Development Goals agreed to in 2015. We have collectively participated and information-shared in a number of conferences, programs and meetings – beginning with the 26 April 2016 kick-off conference "The Sustainable Development Solutions Network – Great Lakes: Regional Solutions to Achieve the SDGs". Most importantly, we have designed, undertaken and publicized actions that concretely move us forward. On 13 September 2020 we formally recognized the importance of adapting solutions to circumstances in order to assure their sustainability. By sponsoring the Home-Grown Solutions Awards, we are drawing positive attention to this critical success factor. Finally, as a thought leader in an institution of higher learning, I have been working under the banner of SDG 4 "Quality of Education" to improve funding, inter-institutional and international partnerships, teacher quality and student awareness. My hope is that tangible, sustainable engagement will result and that I will be able to report on examples of this engagement in future editions of this Newsletter.

An Introduction from the Network Manager



**Salomon Nshimiyimana,
Network Manager and
Campus Administrator,
Rukara Campus,
University of Rwanda**

I am pleased to share this second edition of our Network Newsletter with you. Many of you have enthusiastically contributed information on your current successes and frustrations and on how you are maintaining momentum – in spite of the challenges and obstacles confronting you in this age of pandemic. I encourage you all to view this as your Newsletter – a platform for publicizing your actions and ideas that will be read beyond your home institution and beyond your country borders. On a day-to-day basis I oversee the secretariat of the Network, alerting of opportunities, introducing people working on similar initiatives, raising awareness of the Sustainable Development Goals and improving the Network's visibility. In this second issue of the Newsletter, I am particularly pleased to highlight the youth initiative to participate in *Umuganda* – neighborhood-based assistance and improvement – as a way of reinforcing self-sufficiency, community ownership and quality of life in Rwanda. This activity directly supports the community service role that schools and universities must play, alongside their research and teaching/learning roles. SDSN-GL works with academic institutions to support their efforts in these areas.

Addressing the Challenges of the Covid-19 Pandemic

The ongoing COVID-19 pandemic continues to affect all our member countries and institutions. In the same way that Central Banks are required to stress test the commercial banks they regulate to ensure that those commercial banks will be able to survive difficult times that might arise, the corona virus pandemic is testing the sustainability of our development programs and institutions in all sectors. These programs and institutions are often fragile, under-funded, and focused on day-to-day survival.

Some of us are finding ourselves severely tested by the business slowdowns, the loss of key staff to illness and the incredible productivity decreases resulting from shortened work hours, the time and expense of plexi-glass barriers, fever-screening, hand-washing stations, deep cleaning, masks and virus testing. We are learning, through painful experience, that we must build excess capacity, contingency financial reserves, buffer stocks and increased flexibility, into our projects and activities. We need to ensure their survivability even in cases of *force majeure* like the corona virus, that we could neither anticipate nor avoid even with our best efforts.

We are pleased to note the way our Network members are responding pro-actively to the COVID-19 virus. At some institutions there are staff who are participating in COVID Task Forces. Some universities have been devoting space to quarantine and treatment centers. Students have been volunteering in many cities and towns to help enforce existing health measures that have been put in place to stop the spread of the COVID-19 virus. Let us know other ways in which you are mounting constructive responses to the pandemic, thereby ensuring the survivability and sustainability of the initiatives we have been undertaking, developing and supporting.

#1 Rwanda – Youth Engagement

SDSN-GL has a department devoted exclusively to youth engagement. Youth are defined as those below the age of 30 or 35, depending on the country in question. The current Student Coordinator is Ninette Nsabimana. She has been in contact with student leaders in both Burundi and Rwanda, helping establish “hubs” – points of contact, sources of information and centers of SDG outreach – at Universities in both countries.

Umuganda, Rwanda



Students at the Busogo Campus of the University of Rwanda during an agricultural Umuganda activity

On the last Saturday of every month for three hours, Rwandans of all ages (from 18 to 65) meet in their neighborhood or village to contribute their “sweat-equity” to projects that will bind the community members closer to each other, will help the community’s prosperity and will “lend a helping hand” to those who by virtue of age, illness or infirmity are not able to fully provide for themselves. University students

in Rwanda have begun to formally organize their Umuganda participation in order to create goodwill in the communities in which they are studying, and in order to provide a manpower boost to the community, allowing the completion of projects with greater speed and the undertaking of larger projects. An additional dividend of this work is that Rwanda’s university-level youth develop first-hand appreciation for community mobilization and engagement, for grass-roots level poverty alleviation and consensus-building.



Students from the Gikondo Campus of the University of Rwanda clearing weeds in a field during an Umuganda activity

Particularly for Rwandan students recently returned from the diaspora, or raised in cities, these may be their first times experiencing the challenges of undertaking sustainable development at the base, focusing on the poor – those who still, unfortunately, represent the vast majority of the populations of our

Network countries.

As an antidote to accusations that University students are out of touch with the development priorities of their countries and that they consume scarce public resources while giving little back to society, participation in Umuganda is proving to be a powerful way for students to increase their understanding, improve their image with their host communities and to participate in keeping alive a treasured “home-grown solution”.

SDG Summer School Hosted in Kigali, Rwanda



A participant working on designing a Prototype Project

Home Association, a Paris-based student-focused Non-Governmental Organization, in partnership with the University of Kigali and SDSN-GL youth department hosted an SDGs summer school program in Kigali from 19–26 August 2019. This attracted 21 students from three Rwandan higher learning institutions. The program was conceived as a platform from which participants could channel their creativity and build innovative and sustainable digital solutions to some of the most pressing challenges facing the society.



Participants and facilitators in front of the host institution, the University of Kigali

During the program students were divided into five teams corresponding to five SDGs: Goal#13 Climate Change, Goal #5 Gender equality, Goal #14 life on the land, Goal# 4 Quality Education and Goal#3 Good health and wellbeing. After two weeks, participants were able to use design thinking to identify problems relating to their specific SDGs and then to find creative solutions to prototype and test.

The program was mentored by interdisciplinary experts from Paris. Students were given many opportunities to develop and improve new technical skills and apply these digitally-focused skills on their assigned SDG goals. The SDSN-GL youth division is committed to organizing and supporting similar initiatives in the future to ensure that the youth, especially, students in higher learning institutions from all Network countries are actively involved in the implementations of the SDGs and in assisting their local communities in finding long-lasting solutions to pressing development challenges.

Contact-person: Ninette Nsabimana

2 – Rwanda – Equitable Urban Development



RISD Director, Annie Kairaba

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RISD, the Rwanda Institute of Sustainable Development, has been very active. It is a Rwandan-registered Non-Governmental Organization, established in 1997, whose focus is on advocating for equitable access to and use of land (SDG 10 – Reduce Inequalities and SDG 15 – Life on Land). It recently signed a Memorandum of Understanding with the University of Rwanda to encourage a pooling of energies and resources with that institution. It is seeking other interested groups with which to collaborate as well. RISD has recently taken the lead in a partnership with the Regional Center for Land Governance & Green Urbanization with which it is piloting an “Inclusive Informal Settlements Redevelopment Project”, in Gasabo, Kimihurura and Kacyiru districts. The idea is to make unplanned settlements more inclusive in the future than they are today. Slum-dwellers and squatters are particularly vulnerable to eviction without adequate compensation and without thought to their safe, non-traumatic, secure, legal, long-term relocation. Informed investment and sensitive, inclusive master town planning is what this pilot project aims to achieve. Balancing the rights, needs and desires of all stakeholders when urban land development and re-purposing confronts community solidarity, workforce proximity to employment and the need to formalize traditional and often informal land tenure is difficult, cross-cutting and sometimes exasperating, but well-worth the effort if the urban poor and well-financed, legally-protected land developers, both public and private, can arrive at solutions that allow them all to thrive and to peacefully co-exist. As envisioned, the pilot project targets SDG 5-Gender Equality, SDG10-Reduced Inequality, SDG 11 -Sustainable Cities and Communities and SDG 17 – Partnerships.

#3 – Republic of Congo – Climate Change and its Effects on Agriculture



Loudima, Republic of Congo

Dr. Lambert Moundzeo has informed us that his important work continues. He is an agro-climatologist and eco-physiologist. The research center he leads focuses on the region of Loudima, Congo. This is a district in the Bouenza Region in the south of the country. This is largely a sugar cane, mango and pineapple producing region, about 130 km. northeast of Pointe Noire. His work seeks to identify trends and patterns in temperature, rainfall and weather-stimulated insect infestations to ensure that appropriate plant varieties are developed, propagated and disseminated that will be able to prosper in the face of climate-induced changes in their growing environment. This work is being undertaken by a team led by Dr. Moundzeo under the auspices of PRASAC (Pôle régional de Recherche Appliquée au développement des Systèmes agricoles d'Afrique Centrale), which is an organ of CEMAC (Communauté Economique et Monétaire de l'Afrique Centrale), It is worth noting that four of our Network member countries are concurrently members of CEMAC: Republic of Congo, Burundi, Rwanda and Democratic Republic of Congo. Dr. Moundzeo's other professional interest, eco-physiology, deals with the adaptation of an organism's physiology to environmental conditions. Dr. Moundzeo's team works to ensure the sustainable management of the region's plant resources. This is an important step in the development of robust, profitable and sustainable agriculture and agro-industry. He achieves these through plant protection, information and research-findings dissemination and collaboration.

Dr. Moundzeo explained that smallholder agriculture on the national level is heavily based on the cultivation of cassava. Very little cereal is produced, although several very large-scale farmers are now experimenting with rice and maize production, the latter mostly destined for the poultry feed market.

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Smallholder farmers also produce, and consume, a broad range of legume crops, including common beans, Bambara groundnut, groundnut, cowpea, and soybean. One problem confronting local farmers is that there is no organized production of commercial seed of these crops, so farmers must depend on recycled seed from past harvests. There is no certified improved seed available anywhere in Congo, outside of a few agro-dealers who import hybrid maize seed from Vietnam and South Africa and sell this seed at very high (\$10 per kg.) prices. As a result of this lack of quality seed, farmers' yields suffer tremendously. Partly due to this lack of quality seeds – and partly due to other factors – the staple cassava crop is heavily affected by high incidences of mosaic virus and brown streak virus, adversely affecting food security.

#4 – Burundi – Organic Waste Exploitation

Dr. Liboire Ngendahayo, the Director of Research at the University of Ngozi has reported that his work on production of organic fertilizer has reached a temporary impasse. As some of the readers of this Newsletter will remember, this project was given universal support and endorsement at the April 2017 SDSN-GL Conference, both for its relevance and its replicability.



This initiative is a public-private partnership between the University of Ngozi, ADISCO (Support for The

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*Young contract pig farmer
during training*

Integrated Development and Solidarity in the Hills – l’Appui au Développement Intégral et à la Solidarité sur les Collines) and CAPAD (Confederation of Associations of Agricultural producers for Development – Confédération des Associations Agricoles pour le Développement) and BIOPOST-COFUNA, a French agro-industrial firm. The local production of organic fertilizer will help improve agricultural production. Furthermore, the project directly contributes to SDG-2 Food Security and Sustainable Agriculture, SDG-15 on Life OnThe Land, SDG-1 Poverty Eradication (due to its focus on improved livelihoods for smallholder farmers) and SDG-12 Sustainable Consumption and Production – since the fertilizer will be produced from domestic waste. Dr. Liboire has pursued financing for his team’s activities from the World Bank, with help from SDSN-Paris.

5 – DRC – Piglet Contract Farming

Dr. François Xavier Ndungutse (University of High Technologies of the Great Lakes, UHTGL-Goma Campus) has collaborated with two specialists from the Vision Agribusiness Farm in Rwanda, J.C. Shirimpumu and A. Ndayambaje, designing and implementing a pig farming project. Improved nutrition (SDG 2), poverty alleviation for smallholder farmers (SDG 1), food security and job creation (SDG 8) – especially for youth – were the hoped-for outcomes. Exotic (non-native) breeds of pigs have been introduced.

Pig – often referred to as swine – is the most profitable of all animal-raising activities in this region. Demand outstrips supply in the Rubavu/Gisenyi-Goma twin cities area, meaning that an excellent market opportunity exists here. The project places emphasis on professionalization of the tasks along the pig value chain. This approach



Proud owner of this new piglet

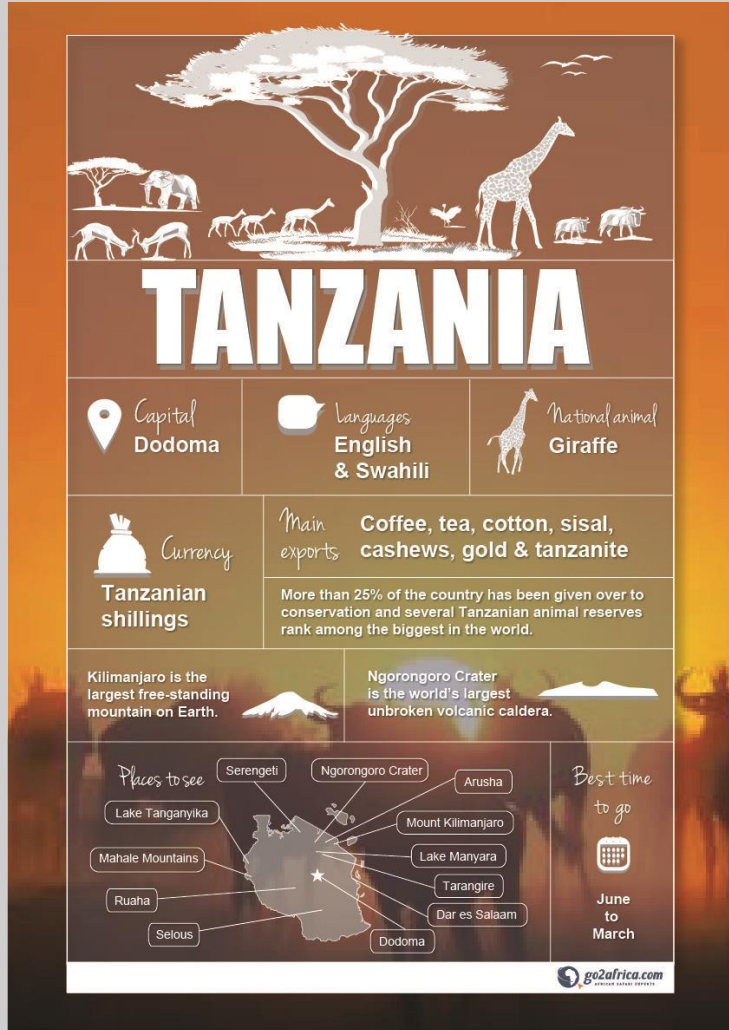
For more information on this project, please contact: Dr. François Xavier Ndungutse, Directeur de la Coopération, Développement et Recherche Scientifique/UHTGL-GOMA
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is consistent with the Government of Rwanda's policy of placing an emphasis on increased quality and quantity of animal production. The government has demonstrated its commitment to the implementation of this policy by supporting the importation of improved swine breeds.

Dr. François and his colleagues set up a farm based on contract farming principles, where the contract farmers working with the project farm would focus specifically on fattening pigs for sale. Significantly, most of these contract pig farmers were young people. The arrangement between the farm owners and the contract farmers who worked with it was that the farm would supply each contractor with five 2-month old piglets, training on care and feeding of the pigs and introductions to feed producers and sellers, to ensure that high-quality inputs would be fed to the piglets.

The early results have been positive along four dimensions. **Scalability.** Through word-of-mouth and publication and dissemination of early results people in other parts of Rwanda have approached the project requesting guidance in replicating the model in other parts of the country. **Retention** of trained young pig farmers. The incomes, self-pride and skill-acquisition have kept the contract farmers committed to pig farming after their training and after the initial investments have been made. **Improved nutrition and food security,** through consumption of meat protein in the diet (of the farmers and their customers), through application of pig manure on other crops and through more disposable income with which to purchase a better, more varied diet. **Cash generation.** The five piglets provided are sold after 5 months of fattening for a total profit of \$325.

#6 – Tanzania – SD Goals – Statistics to Note



Owing to the fact that Tanzania has just transitioned from lower to middle income status in the Great Lakes sub-region, we are providing a few key reference statistics on Tanzania to raise awareness among our stakeholders, to stimulate debate on whether Tanzania might be a role model for other countries in the sub-region, and to congratulate Tanzania on achieving this milestone, five years ahead of its own timetable.

World Bank-established lower-middle income threshold (expressed in GDP/capita): \$1,006

Tanzania's GDP/capita level, announced by the World Bank on 3 July 2020: \$1,050.68

Population: 58.5 million (July 2020 estimate)

#7 – Network-wide Event Summary: The Home-Grown Solutions Awards



Opening screen for the on-line awards ceremony

One factor determining the sustainability of innovations introduced in the Great Lakes sub-region is that the innovations are “home-grown”. This means that they are indigenous, or adapted to local conditions rather than imported unmodified. Indigenous solutions often enjoy faster adoption and greater sustainability than unfamiliar foreign technologies. To spotlight and honor some of the most interesting, innovative and impactful indigenous development solutions that have been introduced in the last year, on 14 September 2020 the Network hosted the SDSN-GL Home-Grown Solutions Awards. Sensitive to Network members’ difficulty traveling due to the corona virus, border closures and cancelled flights, the Network leadership made the decision to organize the event virtually, with participants staying in their home countries and institutions, coming together only through the digital facilitation of the internet. Participants represented DRC, Rwanda and France. The virtual ceremony included award-winners, hopefuls, and the organizers of the ceremony. The awards drew attention to innovative, impactful and interesting initiatives.

The competition’s focus on home-grown solutions was one of this year’s activities emphasizing the role of universities in the implementation of SDGs. One of the achievements of the competition was the opportunity it created for students, researchers, and industry experts to interact with and learn from each other, all the while showcasing home-grown solutions to achieving sustainable development goals while hopefully simultaneously addressing the disruptions caused by the COVID-19 pandemic.

By the announced deadline, SDSN-GL had received 24 proposals from various higher learning institutions and NGOs in both Rwanda (16) and DRC (6). The proposals submitted addressed SDGs as diverse as Quality Education, Clean Water, Ending Poverty, Ending Hunger, Good Health, Gender Equality, Affordable and Clean Energy, Decent Work and Economic Growth.

The proposals were evaluated and ranked on a 100-point scale. Six over-arching content areas were ranked in each submission:



Vertical axis wind turbine from Windsol Power, the runner-up project

- Localization of the problem- whether the objectives and expected results of the project addressed local problems, issues, and opportunities.
- Linkage of the emphasized SDGs to COVID-19-mitigation. Determining whether the project takes into account one or more Sustainable Development Goal and the extent to which the project results provide solutions to COVID-19 pandemic effects.
- Innovation and transformation, looking specifically at the degree to which the project:
 - ❖ Clearly demonstrated innovative character
 - ❖ Presented new solutions that went beyond the existing practice in the concerned sector
- Had the concrete and realistic possibility of follow-on activity and/or scalability after the end of the project. A Strengths-Weaknesses-Opportunities-Threats (SWOT) analysis that is clear, logical and detailed.
- Budget and finance - assessing whether the estimated costs of the proposed activities were reasonable and payable.

Publishability of methodology and/or findings. This would assure wide dissemination and replicability outside the home community where the project was to be implemented.



Decorative vase from the winning project

The winners and their winning topics were: Josee Uwamariya – Innovation in Pottery – Her first-place, price-winning concept was to halt the disappearance of traditional woman-led pottery making by teaching female potters to use crushed glass and plastic waste as inputs into the creating of new, unique, environmentally-friendly pots based on traditional designs and methods.

Emmanuel Mayani – Windsol Power – wind and solar-power developers. They will develop reliable off-grid clean energy, primarily through their vertical wind turbines that will capture and convert wind into usable electricity regardless of the direction from which the wind blows. Its products will be designed to be particularly relevant during the nationwide school closures that have moved all schooling away from schools and to remote villages often lacking electricity.

Dr. François Xavier Ndungutse – Assessment of the Situation In the Milk Value Chain in Masisi Territory, North Kivu province, DRC – His project capitalized on the imbalance between the low supply and high demand for hygienic, high-quality milk in the Masisi-Gisenyi corridor between DRC and Rwanda. What production there had been was reduced due to the COVID-19 related lockdowns and bans on transport movements.

We would like to thank all the contestants for their effort as well as recognize the work of the members of the selection committee.

Dr. Chika's book is available for free download with the cooperation of its publisher, Springer Open Press, at: <https://www.springer.com/gp/book/9789811366345> or at <https://library.oapen.org/bitstream/id/bc50d2c2-78d3-4252-aef4-fbfabb7c8116/1006886.pdf>

To quote Dr. Chika Ezeneya-Esiobu, former Director of Research at the School of Finance and Banking (now absorbed into the University of Rwanda) and author of the book Indigenous Knowledge and Education in Africa "home-grown solutions awareness is growing, but so much remains to be done." One of her messages is that sustainable home-grown solutions will result when curiosity is stimulated, interest is captured and when education is no longer an abstraction. The awards presented in the ceremony recognized projects that met Dr. Chika's test of what qualified as sustainable home-grown solutions. In their final remarks, the SDSN-GL Management Team urged all present to apply the award-winning ideas in their work, so they would be mainstreamed and would survive over time.

Upcoming Activities

SDSN-GL is planning to organize a Conference at the end of 2020, to focus on SDG-4 (Quality Education). We will communicate in the weeks to come our final decision on whether this event will be held physically or virtually. Start thinking about presentation topics now!

Massive Open On-line Courses (MOOCs) on Sustainable Development. SDSN-GL organized formal, structured participation, in Rwanda, in the "Introduction to Sustainable Development" MOOC in 2019. Building on this – and particularly appropriate during this time of pandemic precaution – members of the SDSN-GL should be aware that a number of timely, relevant Massive Open On-line Courses (MOOCs) are available (<https://www.classcentral.com/institution/sdg-academy>). These cover topics as diverse as Sustainable Cities, Public Health and Terrestrial Eco-system Preservation. The instructors are drawn from prestigious institutions all around the world and the contents are rich and informative without being overly-technical. The courses are free and self-paced, and provide turnkey syllabi for those interested in taking a course or supervising the delivery of a course to an audience particularly interested in sustainable development themes.

