

ProSus

Promoting Sustainability Solutions

June 2023



Strengthening collaboration for sustainability through connecting, listening, and learning.



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NEW WAYS OF WORKING TOGETHER TO SUPPORT RENEWABLE ENERGY TRANSITIONS IN WEST AFRICA:

The ProGREEN West Africa Program

By: Dr. Jon Padgham and
Dr. Mary Thompson-Hall

From its inception, the Promoting Gains in Renewable Energy- West Africa (ProGREEN) project aimed to enhance understanding of how renewable energy transitions affect development outcomes, particularly related to food and water security, and the well-being of rural populations. The project has progressed through multiple phases, evolving and adapting in the midst of layered challenges including those stemming from the Covid pandemic that sharply limited face-to-face engagement. Anchored in the belief that efforts to address today's global change challenges (and aspirations) must recognize the importance of human connection, this project actively encouraged the development of collaborative skills of researchers and practitioners who work with diverse stakeholders around critical sustainability challenges.

This issue of ProSuS examines the persistent challenges of energy affordability and access in West Africa, the enormous benefits associated with equitable access to renewable energy, and the progressive ways in which the ProGREEN project has sought to build new connections, strengthen essential competencies, and nurture lasting relationships across sectors and professionals working in the renewable energy space.

The ability of researchers to engage effectively on critical sustainability



challenges, such as transitioning to renewable energy, requires skills and experiential confidence to navigate complexity and uncertainty, and to collaborate with diverse others. These capacities and competencies are not innate but rather they must be nurtured and cultivated through creating an environment that enables deep listening and shared learning across disciplines and domains.

The ProGREEN project recognized the critical importance of creating capacity strengthening outcomes that went far beyond skills transfer, by emphasizing the integration of diverse knowledge and perspectives, by exploring important but often overlooked topics of gender & intersectionality, power dynamics, and justice, and by focusing on how to gain fluency in working with uncertainty, and bringing a systems perspective and future orientation into addressing renewable energy transitions.

The emphasis on active connectivity

across disciplines and domains informed the development of both phases of the ProGREEN project: the first phase, which focused on integrated country assessments to address significant knowledge gaps on renewable energy transitions, and the second phase, which focused on strengthening leadership skills for early-career researchers and sustainability professionals who are committed to advancing renewable energy in West Africa.

Making New Connections and Gaining Fresh Perspectives

The project began by identifying critical gaps in understanding the implications of greater access to renewable energy on key development outcomes. The assessments, which took place in Senegal and Burkina Faso, were designed to address the lack of comprehensive understanding of the link between energy access and development, as well as key forms and functions of financing schemes and regulatory systems for renewable energy in West Africa.

The diverse makeup of the teams, and their modes of working together, emerged as a particularly valuable and impactful dimension of the assessment component.

A mixed-team approach was undertaken in both countries, bringing together early- and mid-career experts from universities, research centers, government agencies, private-sector organizations involved in finance, and representatives from civil society.

That approach, which aimed to foster integrated learning between research, policy and practice, was a new way of working for most team members and highlighted the rich learning opportunities found in doing integrated science.

Developing Collaborative Capacities for Deeper Connections Across Stakeholders

The first phase of ProGREEN (the country assessments) was critical for informing the development of the second phase on developing science leadership competencies – in particular, the consistent finding across Senegal and Burkina Faso that poor communication, coordination, and connection between renewable energy actors hinders progress towards advancing a clean energy transition.

Such barriers, though often recognized, are rarely given sufficient attention compared with more linear, technologically oriented approaches to addressing problems. Moreover, actors (both scientists and non-scientists) are often expected to know how to work and communicate across diverse groups on complicated and often contested issues without any dedicated training.

This set of circumstances pointed to the need for a holistic approach to capacity strengthening for science leadership



that was then developed and applied to the energy transition context of ProGREEN. START and Reos Partners collaborated together on the second phase of ProGREEN to design a leadership fellows program targeted to early career renewable energy scientists and professionals from Francophone West Africa. The leadership fellows program provided integrated insight and learning on how to work more effectively in complex environments with diverse stakeholders who bring varying values, priorities, knowledges and perspectives to the challenge of renewable energy transitions.

The ProGREEN project was framed by critical renewable energy challenges and capacity strengthening priorities in West Africa. This issue of ProSus explores the richness of integrated learning that occurred through the ProGREEN project, including testimony of its impact from the fellows themselves as well as core team members who were there throughout the journey.



Promoting Gains in Renewable Energy - West Africa (ProGREEN) is a project implemented by START with support from the Fonds de recherche du Québec (FRQ).



Dr. Jon Padgham
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Perspectives

Pushing the boundaries in research and practice landscapes

By: Dr. Mariama Camara

Tremendous efforts have been made to reach Sustainable Development Goal (SDG) seven, "Ensure access to affordable, reliable, sustainable and modern energy for all" before the 2030 deadline. Governments in West Africa have raised sizable amounts of money toward efforts for transitions to renewable energy, and decentralized solutions have become a key part of improving energy access, and improving livelihoods and well-being in rural areas. Substantial investments have also been made in regional financial schemes like "pay as you go". However, as of now, the region's potential for renewable energy remains largely untapped, and levels of qualified personnel to support energy transitions are persistently low.

To make tangible progress with the energy transition, it is necessary to build on existing regional efforts to advance skill-building and specialized training. A variety of trainings are ongoing at the regional and national levels, but the majority utilize conventional, one-way knowledge transfer modalities that adhere to standard curricula and rarely permit updating. In addition, bilateral and multilateral initiatives have been organizing training sessions for early-career professionals, however, these usually either reiterate traditional curricula or strictly focus on the particular project in which they are implemented, without taking participants' broader needs into account. Based on these observations and the findings of the ProGREEN regional assessments in West Africa, START ventured to develop an innovative and highly interactive leadership program for francophone early-career scientists and professionals in the renewable energy sector.





With its focus on helping participants grow their abilities and interpersonal skills for flexibly working through tough challenges in collaboration with diverse others, the ProGREEN Leadership Fellowship Program, designed in partnership with Reos Partners, has brought fresh perspectives to the francophone renewable energy capacity strengthening landscape. During our development of the module content and through co-facilitating the online sessions, I came to recognize the value of exposing the fellows to concepts and ideas that are underutilized in the French system and conventional trainings, concepts such as empathy and intersectionality.

These concepts and others helped fellows in developing their confidence, supporting their curiosity, and increasing their openness to sharing ideas. I also greatly appreciated that the program was conducted in French since the language barrier commonly lowers the chance that French speakers will take part in international trainings by huge margins.

Having followed the fellows' progress over the several months since the program's final learning event, I am keen to share these insights with others, especially with school and university administrators to motivate greater conversations on innovative ways that we can all support future West African leaders to be more engaged in equitably and collaboratively addressing global sustainability challenges.



Dr. Mariama Camara
Program Specialist,
START International
Dakar, Senegal



WHY IS COLLABORATION SO CRITICAL IN SCIENCE-SOCIETY INTERACTIONS IN AFRICA?

By: Karen Goldberg, Nwanyibuife Obiako, and Mpinane Senkhane



“If you want to go fast, go alone. If you want to go far, go with others.” ~ African Proverb

The 2020s have been described as the “Decisive Decade”. Whether it is in relation to climate change, resource depletion or degradation or equity, what we do or don’t do during the next few Years will have long-term consequences for us all. And the operative word is “we”: the extent and complexity of the challenges that we face mean that we can only make meaningful progress on these issues if we work together. The Sustainable Development Goals (SDGs) recognise how important partnering, cooperation and collaboration are for their achievement, through their universal, integrated and indivisible nature.

While the necessity for diverse actors to work together to make meaningful progress on our major sustainability challenges is true, the rationale for collaboration in the context of the global south tends to overlook a key imperative for real and genuine collaboration, which is the need to decolonise development and how academic research and researchers interact with society.

For anyone that has been in a research consortium, or worked on an issue that involves researchers and societal stakeholders in the global south, it is well worth asking ourselves:

Who sets the research agenda? Who provides the funding? Who oversees and manages the projects? Who are the supervisors and who are the student researchers? Who makes the decisions? To what extent does the decision-making, project direction and power reside in individuals or institutions based in the global north?

It is likely that many of our answers will point towards a skewed power differential, in favour of individuals or institutions based in, originating, or strongly supported by the global north; and in favour of researchers and academics, as opposed to societal actors, in particular communities.

As such, the imperative for collaboration on the African continent is not only an imperative to address sustainability challenges per se, but to advance justice and transformation as a means to addressing these challenges: and specifically to position Africa, Africans and African wisdom, perspectives and practices on an equal footing as western and northern ways of thinking, being and doing.

Importantly, this means paying attention to, and disrupting, the power differentials that invariably exist amongst different stakeholders in the science-society interface in the African context, and, importantly, the mental models that underpin these differences in power and how power and rank are exerted. This is arguably most pertinent when working on the African continent.

So what are some of these mental models?

Whether we like to admit it or not, deeply entrenched colonial mental models still underpin the view of the African continent as a whole, much of the development paradigm and traditional academia. It is the mindset that conveniently forgets that Africa was and

still is being plundered for its natural and human resources; how its peoples were, and in many cases still are, viewed as second class citizens, ignorant, needing to be steered, corralled and saved, with limited agency, resources or wisdom of their own. It is the assumption that certain types of knowledge or ways of knowing are more legitimate and credible than others. It is the espousal of individualism over interdependence.

So how do we shift these mental models?

Genuine and successful collaboration across the science-society interface in the African context requires acknowledging and shifting these mental models, beliefs and assumptions - in Africans and non-Africans alike. This requires the deliberate development of certain *meta-competencies* (also called "21st-century skills," which are viewed as important for success in today's rapidly changing world) that many of us have never been taught, or if we have, have not thought these relevant to working with others to make progress on sustainability challenges.





So what are the meta-competencies required?

START and Reos Partners have been exploring this question for several Years now, through a number of “Leadership Labs” that we have facilitated for West African sustainability researchers and practitioners. Here we outline five meta-competencies, which we think are particularly important for shifting our beliefs and mental models:

- **Reflexivity:** being able to focus on ourselves and critically reflect on how our own assumptions, experiences and positionality (i.e. our differences in social position and power in relation to others) influence the way we see, experience and make sense of the world, and how others see, experience and make sense of us. Reflexivity can help build contextual awareness and sensitivity when working with diverse people, can help illuminate power relations and power dynamics in a group, and can help to spotlight potentially problematic assumptions that can hinder the success of collaborative work.
- **Empathy:** is about trying to understand the world through someone else’s eyes – to experience the world as they do – even if we have a different perspective or opinion to them. Developing this competency is particularly useful when we hold very different worldviews or perspectives to others we need to work with, and is particularly important when we hold a lot of positional power, in relation to other stakeholders.
- **Flexibility:** is the capacity to adjust to change quickly and calmly so that we can deal with unexpected problems or tasks effectively. Building the competence of flexibility ultimately increases our faith in our ability to handle a wide range of tasks and situations, even in the face of conflict or change. It also invites a sense of openness to other ideas and ways of seeing the world and what might be needed.
- **Courage:** is the willingness to examine your own beliefs, mental models and blindspots and to tune into uncomfortable conversations or issues, including the extent to which we may be exerting our power over others in a way that causes harm. It is also the courage to be open, vulnerable and be able and willing to make mistakes in order to be able to learn, when the situation warrants it. Courage is required by both individuals and groups, in order to address potential power differentials in a group, and to be able to have important, difficult conversations.
- **Curiosity:** This is the willingness and ability to “lean in” or “lean forward” – to learn and understand more about ourselves, how others perceive us and the world around them, the willingness to learn, to try things out, and to be curious, even about the things that are hard and make us feel uncomfortable. Developing this competency can strengthen the efficacy of the other competencies.



What can be unlocked by shifting our mental models, assumptions and beliefs, individually and collectively?

When we start decolonising our minds and our relationships with one another, we are able to develop a deeper understanding for our individual and collective complicity and contribution towards our unsustainable systems and practices as well as our agency in effecting change; and this applies to everyone, not just some. There is the possibility that those of us with more positional power are able to develop a sense of humility and shift away from either centering ourselves, or thinking that we are set apart from the issue, to one of understanding the productive role and contribution we can make, as one of many important actors in the collaboration - not the most important or powerful actor. And through doing so, we can cultivate greater mutual respect, transparency and trust amongst science-society actors and partners, as an important step along the journey to a more sustainable and equitable future.



“My humanity is bound up in yours, for we can only be human together”.

- Archbishop Desmond Tutu



Karen Goldberg,
Reos Partners, South Africa



Nwanyibuife Obiako,
Reos Partners, Nigeria



Mpinane Senkhane,
Reos Partners, South Africa



Nurturing Equitable Collaboration on Energy Futures in West Africa

The energy systems of West African countries face the interdependent challenges of access to energy, energy security, and responding to climate change. More than 60% of the people in this region lack access to energy, with the percentage being significantly higher in rural areas. START and FRQ launched the ProGREEN – West Africa program to look investigate how small-scale renewable energy systems can contribute to a broader energy transition in the sub-region. On the one hand, the findings have shown that policymakers are attempting robust plans to expand access to energy, and every policy put in place aims to tackle the problem of energy efficiency as well.

However, it was also shown that success and sustainability of such policies depends in large part on educational offerings, within higher education and broader capacity building efforts. Such findings are important both in terms of what society expects and needs from the renewable energy- focused programs offered by academic institutions and others with regard to content, and the ability of institutions to adapt to these expectations in terms of delivery.

The ProGREEN program has recognized and responded to this dynamic by seeking to strengthen the foundation of knowledge that young researchers and

professionals will bring to their careers. These are the same scholars who will inevitably become executives and decision-makers for development in their respective countries.

As a member of the ProGREEN Senegal assessment team, and leading a renewable energy finance lab with the ProGREEN Leadership Fellows Program, I can attest to the success of its approach to initiating the crucial process of empowering both men and women to build frameworks for consultation and partnership that are vertical North/South but also horizontal South/South. This approach also strengthens knowledge exchange and communication between participants, thereby bolstering and expanding the dissemination of knowledge that can inform new generations about their roles relating to energy futures.

The leadership program has shown to be an excellent teaching tool, but also a lever for the pursuit of universal access to energy. It is raising the calibre of research through collaboration that is gender- equitable, transdisciplinary, and technically proficient.. It is obvious that specific energy situations in the fellows' various countries of origin are different, and yet ProGREEN has established solid ties amongst the group through a shared focus and by fostering multi-scalar connections through encouraging sharing, solidarity, and equality amongst stakeholders.



Dr. Antoine Faye,
Energy, Policy, and
Finance Consultant,
Senegal





About ProGREEN

The ProGREEN Renewable Energy Assessments

ProGREEN began with identifying critical gaps in understanding of how greater access to renewable energy impacts the lives of different groups of people in West Africa, as well as highlighting incomplete information and understandings of financing schemes and regulatory systems in West Africa, how they functioned, and what could be improved upon. These represented integral pieces of information for comprehensive framings of the renewable energy landscape in the region.

As a first set of activities, the project initiated a comprehensive multi-part assessment effort with multi-sector researchers and professionals from Burkina Faso and Senegal focusing on 1.) the key enabling and constraining factors that influence the development of small-scale renewable energy systems, including solar, and bioenergy, in the region, and 2.) how access to renewable energy impacts the wellbeing of communities in terms of important development priorities.



In both countries, the assessment teams found substantial government efforts to promote renewable energy and to encourage private sector involvement, and considerable work on the part of nongovernmental organizations (NGOs) to nurture the adoption and spread of renewable energy technologies in remote areas. However, the sector continues to face many persistent and layered challenges including insufficient regulatory frameworks and lacking quality control, limited coordination among relevant actors and stakeholders, insufficient available funding, and too few skilled technicians for ensuring reliable and successful energy installations.

The mixed-team approach brought together novel combinations of early- and mid-career experts from universities, research centers, government agencies, private-sector organizations involved in finance, and representatives from civil society. Assessment team members expressed that the diversity of the groups made broader framing of the issues possible, brought different approaches to problems, and produced more balanced results. You can read more about the findings of the assessment teams in Burkina Faso [here](#), and in Senegal [here](#).

The ProGREEN Leadership Fellows Program

Building on previous work on leadership with young scientists working on issues of food security and climate change adaptation, START partnered with Reos Partners to design a leadership fellows program for a group of Francophone early career renewable energy scientists and professionals from across West Africa. We intended this program to be a journey where participants could strengthen their personal and interpersonal leadership competencies for effectively collaborating with others and navigating the challenges addressing complex socio-ecological problems.

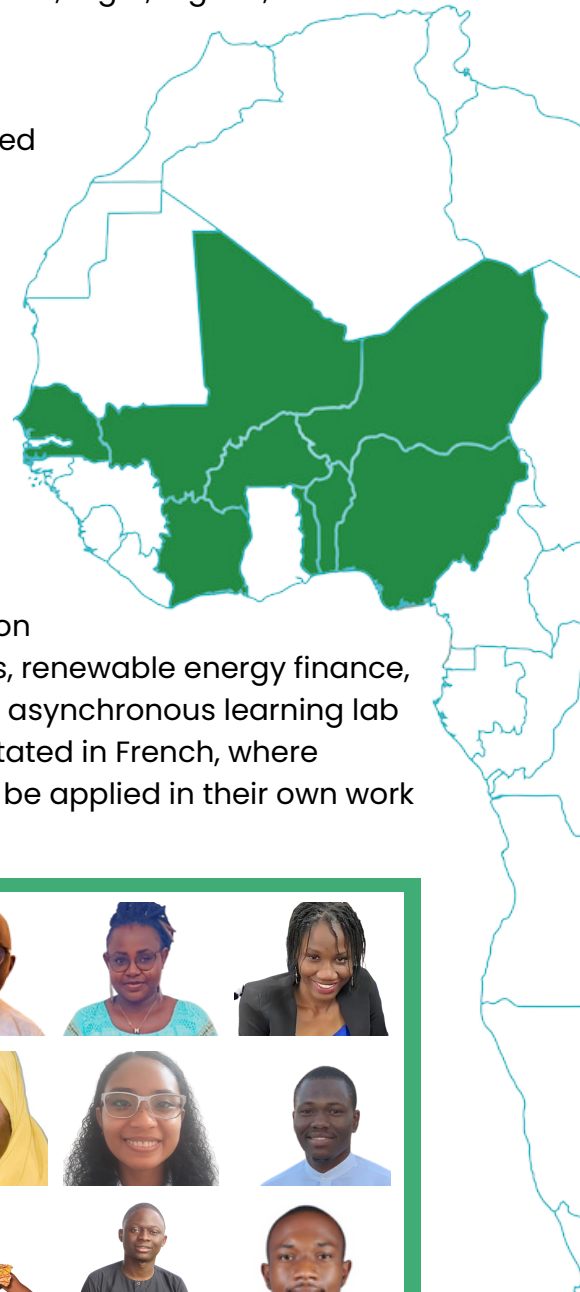
Over 400 applicants were competitively reviewed and narrowed to sixteen gender-balanced fellows from Senegal, Togo, Benin, Mali, Côte d'Ivoire, Niger, Nigeria, and Burkina Faso with multi-sector backgrounds in academia, the private sector, the public sector, and civil society.

Over 10 months, these fellows progressed through combined synchronous and asynchronous modules on:

- Foundations for Impactful Collaborations
- Systems Thinking
- Foresight; Reflexivity and Empathy
- Flexibility
- Learning and Growing in the Face of Discomfort and Uncertainty
- Power, Gender, and Intersectionality
- Reducing Injustice
- Dealing with Stuckness in a System

The modules were complemented by supplemental labs on communications, current solar and bioenergy landscapes, renewable energy finance, and proposal writing. Each module consisted of an online, asynchronous learning lab coupled with a synchronous, virtual contact session, facilitated in French, where participants could reflect on how the lessons are or could be applied in their own work and where they could interact with their fellow participants around the theme with carefully designed, participatory exercises.

An in-person final learning event was held in December, 2022 where the fellows had the opportunity to exchange insights about their experience with their peers, reflect on the most important lessons learned, and share about their broader work with invited guests from Senegal's renewable energy sector. Keep reading to hear more about the fellows' experiences!





Fellow Insights

CERTIFICAT
OF ACCREDITATION
IN
Wendpayangde Dimiri
BIENDEGA
Professional Leadership Fellows Program
2020-2021

CERTIFICAT
OF ACCREDITATION
IN
Fatoumata TOUNKARA
Professional Leadership Fellows Program
2020-2021

CERTIFICAT
OF ACCREDITATION
IN
Reine Grâce AÏSSAN
Professional Leadership Fellows Program
2020-2021

CERTIFICAT
OF ACCREDITATION
IN
Diamondia
SAKOTONBINA
Professional Leadership Fellows Program
2020-2021

CERTIFICAT
OF ACCREDITATION
IN
Pinguwende Inde Erestine
DUMINGA/NANA
Professional Leadership Fellows Program
2020-2021

CERTIFICAT
OF ACCREDITATION
IN
Annette Chymelle
Akpefori ADANMENO
Professional Leadership Fellows Program
2020-2021

CERTIFICAT
OF ACCREDITATION
IN
A. K. Sidick DIARRA
Professional Leadership Fellows Program
2020-2021



Chronologie

Amami
Amami
Amami

Réflexivité
Empathie

Flexibilité:

croître

à

CERTIFICAT D'ACCOMPLISSEMENT
Mahugnon KOTOHODJO
PROGREEN Leadership Fellows Program
8 novembre 2022

CERTIFICAT D'ACCOMPLISSEMENT
Mahamadi GABA
PROGREEN Leadership Fellows Program
8 novembre 2022

CERTIFICAT D'ACCOMPLISSEMENT
Cheikh Ahmadou MBODJI
PROGREEN Leadership Fellows Program
8 novembre 2022

CERTIFICAT D'ACCOMPLISSEMENT
Mahamadou MOUSSA AMANI
PROGREEN Leadership Fellows Program
8 novembre 2022

**BUILDING
A BETTER
FUTURE
TOGETHER**



Q&A With The Association of Young Energy Actors in West Africa



Wendpayangdé
Dimitri TIENTEGA
ProGREEN Fellow,
Burkina Faso

What is the Association of Young Energy Actors?

The non-profit organization Association des Jeunes Acteurs de l'Energie - JAE (Young Energy Actors) was created in Burkina Faso in 2019 and received its official recognition on April 1, 2021. Since 2022, branches have been established in France, Benin, and Mali, and the Senegal branch is coming soon. The core mission is to engage youth in the renewable energy sector, environmental education, and other related disciplines to accelerate the achievement of the Sustainable Development Goals. We are organized into working groups carry out capacity building efforts, advocacy, and also development projects.

Where and how did the association begin ?

While I was enrolled in the University Joseph Ki Zerbo's Applied Solar Technologies Master program in Ouagadougou, there was little youth involvement in the sector and little promotion of renewable energies. With the help of some friends, we formed a group to begin working on renewable energy initiatives and to hold

conferences with small panels to which we invited our senior colleagues, professors, and experts. The group began expanding as more young people got interested in our activities, and so we established JAE in order to continue growing our impact. Now we are asked to direct conferences, training sessions, and workshops in universities, high schools, associations, groups, and communities.

What could be the benefit of having an association in each African country ?

With more extensive country branches, it would be possible to gain a global perspective on the reality of each country, to learn from one another, and, most importantly, to carry out advocacy and activities with an international focus with ease.

Do you plan to organize regional activities?

Yes, we have plans to hold international congresses of young energy actors, African energy summits, and to incorporate the Burkina Faso energy debates into a Pan-African Cup of Energy Debates with other countries. Also, we want to involve all JAE branches in the next joint European Union and African Union International Round Table of Energy Stakeholders, the first edition of which the branches of Burkina Faso and France beautifully organized on March 18, 2023.



Fatoumata Tounkara
ProGREEN Fellow,
Mali

How did you first hear about the association?

I first came across some information on social media, on Facebook, then, because of the ProGREEN project, I had the opportunity to meet Dimitri and speak with him more about the association.

What made you think this is something you should bring to Mali ?

I had observed that Mali lacked such an

initiative. I saw that JAE's team was young, extremely driven, and active, which I believe helps with its contribution to knowledge and instruction on renewable energy. The action plan is diverse, with a primary focus on the education of youth and the empowerment of women. I realized that an initiative like this would be great for young people in Mali since it will advance youth education and make it easier for them to integrate into the workforce.



Mahugnon Néhémie
Kotobiodjo
ProGREEN Fellow,
Benin

How did you first get involved with the association ?

Meeting Dimitri during the ProGREEN Leadership program was the catalyst for my involvement with the association Young Energy Actors (JAE). Setting up a national framework for youth exchanges around renewable energies was something I was already considering. Instead of starting a new organization, we thought it more advantageous to combine our efforts to offer JAE to a new set of members. Consequently, the Beninese section of the association was founded. This collaboration made it possible to organize the first activity of



the organization in September 2022. A webinar entitled, "Renewable energy's role in Africa's post-COVID economic rebound". This was organized with the Benin Youth Parliament, the Laboratory Society-Environment of the University of Parakou, and other civil society organizations.

What made you think it would be interesting to bring this association to the young energy actors in Benin ?

The key to overcoming the difficulties of promoting renewable energy, combating climate change, ensuring food security, addressing gender issues, and other issues of interest to Africa is to work together. Defining a development strategy that extends beyond micro-level goals is the biggest challenge. With JAE, we are creating a network of young people dedicated to problems of sustainable development. I believe that young Beninese contributions will be highly helpful for my country, Africa, and the entire world.

Current and Upcoming Activities of The Association of Young Energy Actors in West Africa



Burkina Faso

- The fifth edition of the energy debates held under the theme: "contribution of renewable energies and digital technology to the empowerment of young people and women in rural areas in a context of the fight against global warming". The regional champions will meet in May in Ouagadougou for the national stages following the conclusion of the regional phases.
- Intensive Solar Training Project for 52 Young Internally Displaced Persons: Over one million 80,000 people have been internally displaced as a result of the security issue that has plagued Burkina Faso for several years. If vulnerable persons are abandoned, extremist organizations may use them as easy pickings to enlist them in their ranks. In order to provide them with the skills and resources they need to be independent and hire other young people, we are working with the financial assistance of the Support Fund for Vocational Training and Apprenticeship (FAFPA).
- A project to develop solar kits for first access to energy for emergency housing and in rural areas: this project intends to combat energy poverty by developing solar kits for emergency housing and rural locations that will provide initial access to energy.
- A project to install solar lamps in Ouagadougou in neighborhoods with serious security issues.



Mali

- JAE currently conduct virtual meetings twice a month. We also take part in various activities on the association's behalf. Additionally, we are organizing a conference on renewable energy sources.

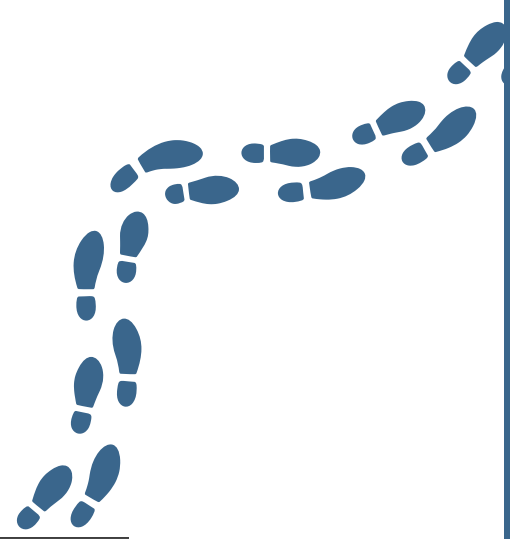


Benin


- The process of recruiting association members has begun. Currently we are holding conversations about creating various working groups. Sessions to strengthen leadership skills, learn how to use tools for teamwork, mount solar panels, and hold public conferences are all scheduled. And a national JAE congress will be held in the third quarter of 2023.

For more information on Association des Jeunes Acteurs de l'Energie - (JAE), please follow us on [Facebook](#) or [LinkedIn](#)!

REFLECTIONS FROM THE FELLOWS



Ines

Press  for English Subtitles.



Dimitri

Press  for English Subtitles.



THE HEART OF MY PROGREEN ADVENTURE

Last February, my life changed in a good way because I discovered the existence of a Francophone leadership program for West African renewable energy juniors called the ProGREEN Leadership Fellows Program. The focus on leadership is, in my opinion, a revolution because most of the existing capacity support programs in renewable energies focus mainly on the technical and purely pragmatic sides. Many of the programs I have been involved in offered the same type of modules based primarily on sizing techniques for installations and software.

What a lovely surprise it was for me to learn that the new program I was applying for focused more on the leadership and management side of renewable energies for better application. I embarked on this adventure in March 2022 and continued until December. During these 10 months, I was able to meet young scientists and professionals who share the same passion as me, that of clean and sustainable energy independence for Africa. Through their testimonies, my colleagues, as I call them, allowed me to notice that we share the same challenges regardless of our country.

This has been a opportunity to develop my communication skills to better relay project ideas with influence. Further, we learned about resilience in the face of difficulties or program changes, important current issues such as respect for gender, and the importance of the consideration of all stakeholders.

in a development project. These modules were a very refreshing and invigorating trip for my brain due to the pedagogy and the sympathy of the talented trainers. The modules and case studies covered in the program helped me on a daily basis in my work as a project manager at Impact Hub Abidjan in Côte d'Ivoire. It has also given me the skills and the strong network to become the leader I've dreamed of, to bring my contribution to the development of renewable energies in my home country of Niger.

After eight months of virtual meetings on Zoom, the closing ceremony for the program was held in the beautiful city of Dakar. This gave us fellows the chance to finally meet in person. During this trip, we were able to deepen our relationships and camaraderie, as well as meet and pitch our future development plans and ideas to key actors in the renewable energy sector in Dakar.

Overall, the PROGREEN program allowed me to grow as a leader and to have more confidence in my skills. Without a doubt, it is a program that I would recommend to my friends that work in the same field as myself.



Moussa Amani
Mahamadou
ProGREEN Fellow,
Niger & Côte d'Ivoire



Team Reflections



STRETCHING BEYOND MY COMFORT ZONE

My experience working with the ProGREEN Leadership Fellows Program

By: Ellen Sow

As a social science student doing an MA in African studies, my experience within the ProGREEN team was extremely enriching. The project featured a large range of young professionals with very diverse backgrounds from all over West-Africa. Being able to contribute to- as well as learn from- the leadership lab, gave me the opportunity to discover more about interests and perceptions of those working in the field of renewable energies in West-Africa. Furthermore, it was also a chance for me to get to know more about some of the work that is being done by the community of young renewable energy-enthusiasts. It was amazing to see this group creating jointly an amazing space for sharing and learning about leadership.

This was a first working experience in my field of study, and so it was important for me to do so within the framework of an organisation that is in accordance with my values. Therefore, to me working with START international and REOS partners jointly on this project was not only a great way to discover their work is but also to learn how to take initiatives and share knowledge in an ethical way. I highly appreciated the work culture which built a safe space for every participant, fellow, facilitator or guest to share and learn in a comfortable and respectful way.

Working on this project has pushed me out of my comfort zone as my tasks expanded from desk research to back the leadership-lab modules, to supporting the facilitation of the discussions and activities of the contact sessions.





While taking up these new tasks was quite intimidating at first, seeing that my colleagues trusted me in that role and even gently encouraged me to further my contributions is what enabled me to step up. This is also what helped me grow throughout the whole time of the project, and it made a visible difference in how I approach and assess my own skills and capabilities now.

The leadership-lab really created a space where all participants were openly discussing ways to enhance their work in the renewable energy sector through means of better collaborations between various actors. The fact that this project emphasized a lot the idea that we are all learning together and from each other helped me to step out of my comfort zone to open up about ideas and contributions and to reach my full potential.

Working with on ProGREEN and more specifically on this leadership lab has in fact opened new pathways for me career-wise. For the first time as a young student entering the professional world, I could see where I could go with my interests and qualifications. So far much of my work has been confined to theory in the academic space of my studies. This experience set a good example on how my theoretical knowledge could be used in real life projects. Finally, I was able to see how my academic knowledge becomes meaningful when applied to programs and projects like this one for instance.

Besides that, it opened up the opportunity for me to facilitate activities and discussions around leadership, which was very enlightening to me, as this is now a career path that I can see myself pursue in the future. I especially liked the contact with passionate professionals who are motivated to exchange and discuss new ways to better their work.



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DEEP CONNECTIONS IN VIRTUAL SPACES

By: Giovanni Sgobaro



How do you create a sense of community, online? How do you shape a virtual space conducive to open discussions and leadership growth with a group of young professionals scattered across a continent, that don't know each other and don't have the opportunity to work in person? Tough question, and one I couldn't fully answer at the beginning of 2022.

I have been part of a great team with amazing colleagues from START and Reos Partners, tasked to co-design and facilitate a Lab within the ProGREEN project in West Africa:

sixteen fellows working on small-scale energy transition in Western Africa were selected among four hundred applicants to attend a ten-month learning process on Systems Leadership for transformation.

When we finally met the group in person in Dakar at the very end of the process in December 2022, we realized that the relationships that had been formed while we had been working remotely were already strong, and the energy in the group was quite alive. The two days of in-person work in Dakar were a success also because we – both participants and facilitators – had established a foundation, some sort of group identity we could build on.

This to me was proof that relationships can grow despite distance. Technology can help, and it can be as much an obstacle as an enabler of relationships: it basically depends on us, on our choices – both as designers and users of a process; but apart from an enabling technology, what else does it take to make relationships grow despite distance and time? To me, a few ingredients might have contributed to this “alchemical” process:

Using online sessions for facilitated interactions, not teaching: a conventional approach to learning would have used group sessions online to present and transmit information, leaving interactions in between sessions to participants; the essence of a Lab, though, is to flip around the standard structure of a course, and use the few precious hours of presence to connect heads, hearts and hands, honoring the power of dialogue, collaboration and creativity to forge learning and relationships.

A shared commitment to exploring concepts through sometimes uneasy conversations: starting with questions that put at the center lived experiences, the whole person, rather than confining learning at the professional or intellectual level. A learning process that puts leadership at the center is necessarily a growth process, and growth is limited without acceptance and openness to showing up fully.



A willingness to experiment and play new or different games together: at times we took some risks in trying out things with the group, adapting exercises we had never done online, experimenting with new ways to engage the fellows' creativity and exploration, without being 100% sure it would have worked. And sometimes it didn't work exactly as we had expected, but we have valued every single drop of learning we could distill out of the experience.

A willingness to evolve and change roles: I suspect that one of the elements enabling deep connection was also displaying the willingness to evolve as a facilitation team: in our small team of three, we haven't always showed up with the same fixed roles and voices, because we were in a way growing with the group and throughout the process.

Encouraging presence, visual contact and acting like if the "frame" wasn't there: it is often tempting - or just practical or convenient - to switch off cameras when we are online, there are always good reasons for it - our busy, ever multi-tasking lives, or just unstable connections that don't work in our favor. Getting out of the "comfortably invisible" bubbles and just be visually accessible to the rest of the group can be a way to encourage undivided attention, albeit framed by a laptop or mobile screen. Also, acting like we would act in real life, without losing spontaneity, humor, energy and movement honors this intention.

So, to conclude, what enables deep connections in virtual spaces? I am not sure that the few thoughts above can be considered a "recipe for success": they are very personal, incomplete and transient. In the end I think they all point to the fact that facilitation and teaching can be blended and combined in many ways; but maybe even more importantly, that connections deepen when we design spaces that value exploration, experimentation, dialogue, questioning, and showing up fully as essential pieces of "luggage" to carry in our backpacks for a learning journey.



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Spotlight on Renewable Energy





Energy transition financing in the West African Economic and Monetary Union

By: Mahamadi GABA

Mitigating the effects of climate change and limiting global warming to below 2°C in accordance with the commitments made in the Paris Agreement and the Sustainable Development Goals (SDGs) will require changes in production and consumption patterns. It is agreed that anthropogenic activities are the main cause of global warming, and the consequences of such changes are drastic on the African continent. This is true even though African countries contribute only slightly to greenhouse gas emissions (Betoni et al., 2015).

In the context of the West African Economic and Monetary Union (WAEMU), the most noticeable effects of climate change can be summarized as increases in sea level, advances of the desert in Sahelian countries, more frequent extreme events (floods, drought), and negative impacts on food production (Faye et al. 2019).

To remedy these problems and ensure the socio-economic development of states while mitigating the effects of climate change, it is important to adopt low-carbon development strategies, particularly through the use of renewable energy. Energy is a crucial



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issue for the West African region, as the average rate of access to electricity is only 54% in the WAEMU region, with great disparity between urban and rural areas. Boosting access to energy will help achieve SDG 7, which aims to ensure equitable and reliable access to clean energy.

This energy transition is achieved through the provision of so-called green finance. Green finance includes all forms of investment or lending that take into account environmental impact and strengthen environmental sustainability (Lindenberg, 2014). Green investments are generally oriented towards mitigation strategies (to lessen contributions to climate change) or adaptation strategies (to help deal with the impacts of a changing climate).

Access to green financing is a major problem for many countries in West Africa today. Statistics show a considerable gap between the level of financing actually received and needs expressed. Based on estimates from ECOWAS, funding of \$340 billion is needed over the period 2015-2030 to

achieve the objectives of the Paris Agreement. For example, in Côte d'Ivoire finance needed for the nationally determined contribution (NDC) are estimated at around \$22 billion (MINEDD, 2022) while funds received by all Sub-Saharan African countries over the 2019/2020 period is only \$19 billion (Buchner et al. 2021).

Few resources are available that analyze climate finance in the WAEMU region and its link to broader energy transitions. Available studies have generally concerned the Community of West African States (ECOWAS) or Sub-Saharan Africa in general (ECOWAS Commission, 2020 ; Halimanjaya, 2015; Robertsen et al., 2015).

Here we seek to reduce the literature gap on climate finance and energy transitions, and to inform policy makers and academics on the characteristics of climate finance related to mitigation in the WAEMU space.

Renewable energy projects are generally financed by climate-related funds, particularly related to mitigation. WAEMU countries that have received the most climate financing related to mitigation to date are Côte d'Ivoire (\$840.9 million), Burkina Faso (\$616.5 million) and Senegal with \$600.7 million (figure 1).

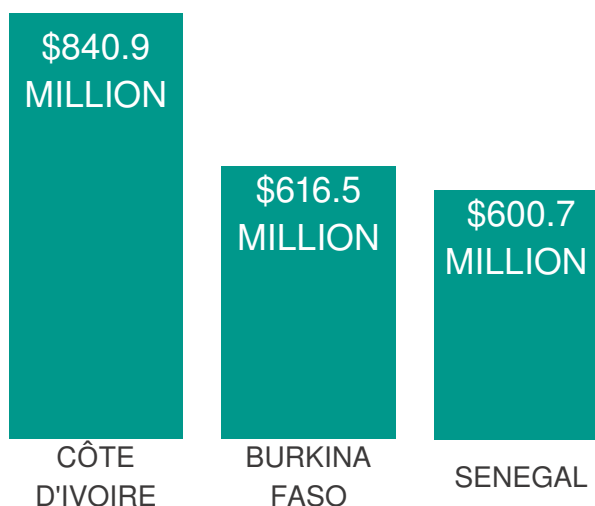


Figure 1: Financing the energy transition in the WAEMU region (Data from OECD, 2000-2020)

These funds have generally been directed towards renewable energy projects such as solar energy and energy efficiency. Climate financing related to mitigation represents a total amount of \$3.3 billion during 2000–2020 period for the eight (8) WAEMU countries.

Climate finance is distributed differently across different energy sectors. Electric power transmission and distribution-centralized grids (\$1,12 billion), energy policy and administrative management (\$789.69 million), and solar energy for centralized grids (\$655.11 million) are the sectors that have received the most climate finance related to mitigation. Hydropower (\$265.87 million) and other renewable energy generation (\$240.15 million) have also received attention for mitigation-related financing. In the power generation sector, Côte d'Ivoire (\$278.33 millions), Senegal (\$254.88 million), and Burkina Faso (\$208.73 million) received the largest volumes of financing, with other countries in the region receiving proportionally lower amounts in this sector.

For energy policy and administrative management, Côte d'Ivoire (\$407.7 million) dominates the amount of mitigation financing received. In the area of solar energy for centralized grids, Burkina Faso (\$285.3 million) received the most funding, while Niger (\$204.72 million) received the most funding in the area of hydro-electric power plants. However, research, training and capacity building, and wind energy are among the areas that have received less attention from donors.

Given the enormous energy-related challenges that remain in the region, current financing initiatives remain below expectations. The amounts needed to achieve Goal 7 remain considerable, valued to the tune of billions of US dollars, while all the funding received for mitigation or energy transition is around \$3.3 billion in the region (Figure 2).

The analysis of climate financing instruments reveals that debt instruments have been the most used

by WAEMU countries. These debt instruments are divided into concessional and non-concessional loans, with the latter predominating. Côte d'Ivoire (\$641.9 million), Burkina Faso (\$414.95 million) and Senegal (\$366.83 million) are the main debt borrowers in the region relating to financing their energy transitions.

The second most common type of instrument used in the WAEMU region is grants, which have mainly been directed to Senegal (\$233.85 million), Burkina Faso (\$201.57 million), Côte d'Ivoire (\$199.04 million) and Benin (\$153.11 million). Grants amounted to \$1.12 billion, while debt instruments totaled \$2.18 billion. Collective financing instruments were the least used in the context of financing the energy transition and are estimated at \$153,000. Such debt instruments are a considerable burden for developing countries such as those in the WAEMU, as it reduces their ability to invest in other economic sectors due in part to the debt interest burden.

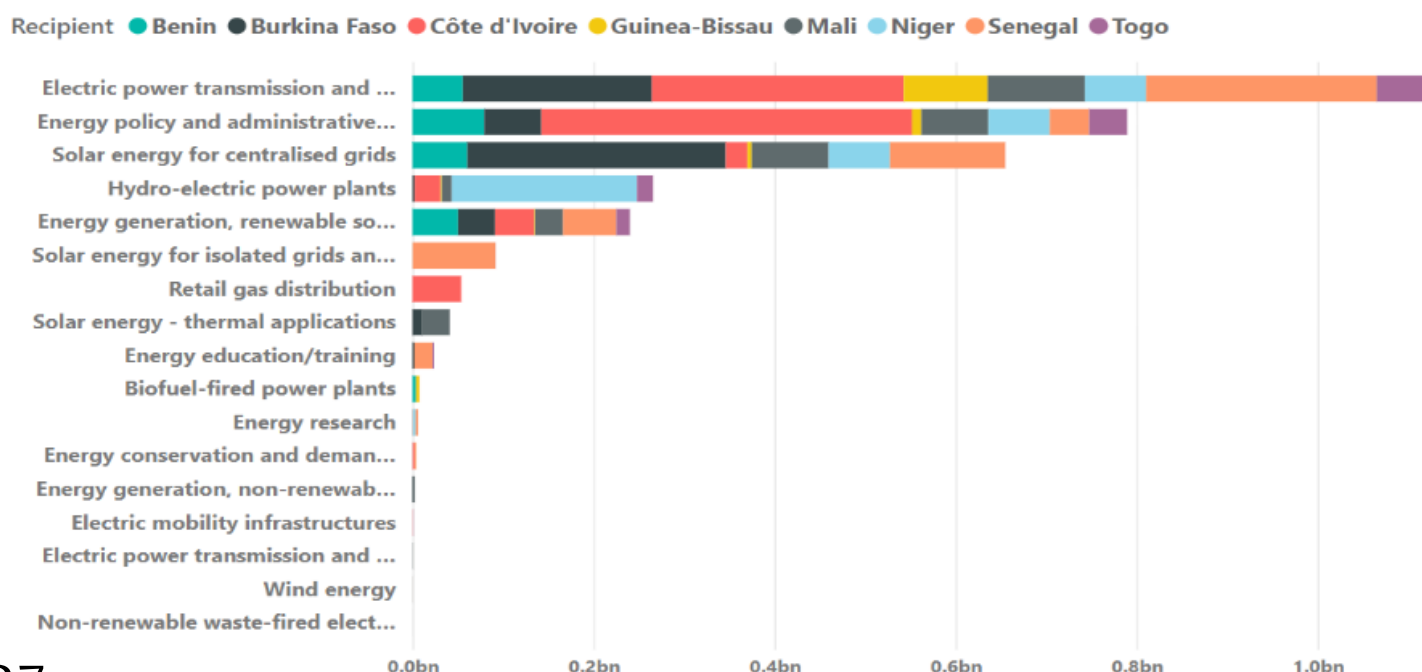


Figure 2: Financing the energy sector in the WAEMU region (Data from OECD, 2000-2020)

Since these countries are less responsible for climate change than many others, financing for climate change actions mainly in the form of grants or concessional loans would be justified. Efforts will have to be made by the authorities to make it easier for the countries in the region to mobilize sufficient amounts for their energy transition.

In terms of types of donors, it is the Development Assistance Committee (DAC) countries that have granted more funding to WAEMU countries with 57% of overall funding, followed by multilateral development institutions with 36% (World Bank, African Development Bank, etc.). Private sector financing is almost non-existent as it represents only 0.35% of total financing. The analyses have shown that efforts are still needed to enable WAEMU countries to access the financing necessary to achieve global climate objectives.

WAEMU authorities will need to step up efforts to further involve the private sector in climate finance, and must strengthen their national entities designated to the various funds so that they in turn can propose national implementing entities capable of formulating bankable projects to the said funds. This will ensure that countries have a direct source of climate finance. Finally, the authorities should advocate to financing institutions for more grants than debts.



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Two Birds with One Stone: Recycling Waste for Green Energy

By: Diamondra Rakotonirina

Energy availability is a key factor in a community's development. But in less developed countries, the majority of people living in rural and peri-urban areas lack access to clean energy, whether it is for electricity or for cooking. Waste management is also a concern in these areas due to increasing population growth. In Togo, in 2020, the World Bank estimated that only 54% of the population had access to electricity, and in rural areas that figure was only 24%. Charcoal and wood are the two main energy sources used for cooking (UNFCCC, 2017), and agriculture and livestock husbandry are the main livelihoods of the Togolese population in rural and peri-urban areas. These activities generate organic waste that is not yet successfully being processed.

It is crucial to raise awareness about the possibility of a win-win solution for addressing these issues. Utilizing organic waste not only helps with waste management by recovering it, but it also enables the creation of biogas that can be used for electricity or cooking. The production of biogas from organic waste offers a comprehensive solution for solving energy production and waste management problems. Indeed, the biogas produced through the recycling of agricultural waste (a process referred to as methanization) can be used for cooking or to produce electricity. Since organic waste is mostly generated by livestock and agriculture, this solution is best suited for rural and peri-urban areas with high energy needs and access to organic waste.



Methanization, or the anaerobic digestion of organic waste, yields substances called digestates, which are biological fertilizers that can substitute chemical fertilizers in a healthy agricultural system. In addition to addressing the issues with waste management and energy access, this approach adds value to agriculture, making it a viable alternative that should be properly utilized. Other renewable energy sources like wind and solar PV are constrained by their intermittent nature. A solution for these limitations is the integration of biogas technology along with these other renewable technologies.



In West Africa, we can look to Burkina Faso and Senegal as examples of the promotion of domestic biogas. Through the National Program of Biodigesters in Burkina Faso (PNB-BF), as of April 30, 2021, 14,443 biodigesters had been installed in Burkina Faso. The functionality rate for these installations is reported to be 85% and they have created approximately 700 jobs.

In Senegal, thanks to the National Biodigester Program (PNB-S), 2,278 biodigesters have been installed, including 2,216 in households and 62 in schools. The functionality rate is 36% and 7,108 jobs have been created, including 4,667 permanent and 2,333 seasonal.

Although there is no denying that biogas technology is a viable option, just 25 biodigesters have been deployed in Togo to date. The Alliance for the Biodigester in West and Central Africa (WCA-AB) encourages all of its members to set up the infrastructure required for the advancement of this technology.

In Senegal, 200 to 250 tonnes of cow dung, animal offal, and other excrement are transformed into energy and biofertilizer each day at Sogas (Société de gestion des abattoirs du Sénégal). This is a project resulting from an agreement between Thecogas and Sogas.





The cogas with its expertise helps Sogas to manage organic waste from the slaughterhouse while producing internal energy at a very competitive price compared to the national utility price.

The biodigester comprises a large machine connected to a 4000 m³ digester by PVC gas tubes. It generates 1,500 m³ of biogas every day and is used to fuel a 100 kW power plant. For its cold rooms, Sogas gets all of the energy it needs from this waste recycling facility. The Dakar slaughterhouse usually produces 150 carcasses of cattle and 1,200 carcasses of small ruminants (sheep and goats). Prior to the establishment of this facility, the slaughterhouse's liquid waste was dumped into the ocean, significantly polluting the environment there, and its solid waste was dumped nearby, emitting methane, a greenhouse gas that is 24 times more dangerous than carbon dioxide.

It can produce reliable power 24/7 by ensuring raw materials are available, and it can handle intermittent renewable energy supplies through energy storage and flexibility. Biogas also allows the capture and use of methane, a potent greenhouse gas that heavily contributes to climate change. It also makes it possible to recover organic waste and divert it from landfill sites, to control the germination of weed seeds, reduce the use of herbicides, and eliminate odor-causing compounds.

In Togo, biogas technology deserves to be explored given the availability of organic waste whether in rural, peri-urban or even urban areas. By selling organic fertilizers, agricultural organizations and agrifood processing businesses can use this technology to manage their waste more effectively, become self-sufficient in terms of energy, and expand their operations. State officials, including with the Department of Research and Energy Development (DRED) within the Ministry of Mines and Energy of Togo as well as the Department of Studies and Planning (DSP) of the Ministry of Environment, Sustainable Development and Nature Protection of Togo must provide a welcoming climate for NGOs and investors interested in promoting biogas in order to popularize this technology and ensure that everyone has access to inexpensive green energy by 2030.



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OUR ORGANIC WASTE AS A CRISIS EXIT SOLUTION?

By: Dr. Lamine Ndiaye

Who still remembers the poem, A Dream, written by René François Sully Prudhomme? I recall it here,

A DREAM

The plowman told me in a dream:

Bake your bread, I no longer feed you, till the soil and plant. The weaver said to me: Make your clothes yourself. And the mason said to me: Take your trowel in hand. Alone, from me the entire human race had fled. Leaving me to provide for everything I needed. And when I begged heaven for supreme mercy, I found lions blocking my path. I opened my eyes, wondering if the dawn was indeed here or was I still dreaming? Bold companions were up, whistling on their ladders, looms buzzed, and the fields were sown. I knew my happiness and understood the fact that no one in the world today can claim to do without others. And ever since that day, I have loved them all.

Today, often with a devious spirit, we make this “dream” our own and we translate it as: “seek self-sufficiency in all things, the world is no longer sufficiently equipped to take charge of everything humanity needs”. Dangerous lions, named COVID-19 and the Russia/ Ukraine Crisis, stand all along the route. And alone, abandoned by everyone, Africa is looking for itself and trying to live with these combined crises which are growing increasingly bitter. The world system has become completely unstructured: the world's super market is completely "seized up", making world trade more expensive. The cost of international transport is multiplied by three or even four. As the world tries to adapt to these challenges on a daily basis, another more pernicious one is looming on the horizon and depriving the world of energy. Petroleum products

are getting harder to find, and their costs are rising across the continent. In addition to the scarcity of gas, the wheat that was supposed to feed a good part of humanity, especially Africa, is blocked in the ports of war-torn countries. These countries represent not only the granary of this part of the earth, but also their main supplier of fertilizers, especially chemical ones. World leaders have thought of sanctioning one of the dangerous lions to soften his position, ignoring that he is a “deaf lion[1]”. Many have moved into its lair. Some have been listened to and few have been heard. The crises carry on.

Due to the conflict in Ukraine, African nations are under pressure from their reliance on countries like Russia and Ukraine for fertilizer. Indeed, the war has hampered such shipments ever since

the Russian invasion of Ukraine began in February 2022. It should be remembered that Russia ranks second globally in phosphorus and potassium fertilizer exports and is the world's largest exporter of nitrogen fertilizers. Belarus is another significant supplier of fertilizer and is a Russian ally that is also subject to Western sanctions.

Additionally, the two countries export potash, an agricultural fertilizer, at a rate of more than 40% globally. The crisis has resulted in record-high prices for fuel, fertilizer, and other commodities, and fertilizer availability is now a major issue on a global scale. Senegal is one of the developing nations that imports at least 5% of its fertilizer from Russia. The West African Fertilizer Business Information Guide, which incorporates data from 2021, emphasizes the significant increase in fertilizer prices between 2020 and 2021 with reference to prices. The cost of a ton of imported urea has increased, in fact, according to this data, from \$319 in Senegal and \$475 in Niger in 2020 to \$652 and \$754 respectively in 2021. The answer is straightforward: "The price of urea has increased, as it has elsewhere"[2]. Governments are preparing for fertilizer and food shortages in the coming months.

LE LABOUREUR ET SES ENFANTS:

"Work hard, sweat all you can: Riches is what counts the least. A rich farmer, sensing his impending death, Called for his children, and spoke to them without witnesses. Do not sell the inheritance left by our parents, he said, As a treasure is hidden in it. I do not know where, but with a bit of courage, You will find it, you will figure it out. Go search the field when summer ends. Dig, scratch, plow, do not leave no earth unturned Anywhere your hands can reach. After the father's death, the sons worked the field Everywhere, over and over again, so that within a JAer It produced more than ever before. There was no money to be found, but the father had been wise To show them before his death That work is a treasure."- Jean de La Fontaine.

This poem, an encouragement to work, is just as evocative as the first. But what work? An invitation to environmentally conscious, sustainable work where the payoff comes at the end of the effort, a task that involves all of the sons and daughters of the plowman and leaves no one behind, an invitation to inclusive and responsible participation.

Even if it is considered a calamity, this crisis situation is also an opportunity to transition to energy and agro-ecological alternatives that are more respectful of the environment. Renewable energies and organic fertilizers are rapidly becoming an alternative. The view of the world on products like biogas is changing, and it is now perceived as one of the strongest alternatives in the field of renewable energies. A Dutch colleague told me not long ago: "We are working a lot on an energy alternative: our farms must become profitable and sustainable by reducing methane

emissions. Chemical fertilizer has become very expensive, we produce more biogas and therefore digestate". Our African leaders should reflect on the comparative advantage we have in this area: how to produce more[3] biogas and organic fertilizer with all the residual organic products we have. A real strategy to at least mitigate the full impact of what is happening is to encourage the use of organic fertilizers.

What is needed now?

The unifying theme for our thoughts and actions is how to add value to our organic waste. How to turn biological waste into a useful commodity, but most importantly, how to decarbonize our economy. In the circular economy, we are the center of gravity. Every day we paraphrase Lavoisier: "nothing is lost, nothing is created, everything is transformed". It remains true that for all this to become reality, it is necessary to train, inform, and above all convince.

Train young people, our future leaders, on how and why to change their mindset. New and existing training should not only not be theoretical, but should also provide pathways for job creation. Unfortunately, rarely have any of these bioenergy sources been used by the students who graduate from our renewable energy training institutions. We who host them for internships in our businesses are always aware of this. We even wonder if their trainers have ever seen one. They have their heads full but the know-how remains a challenge in their integration into our production units. The partnership between a school and a

business for work-study training might be helpful. In every other case, experts must be included in the training sessions. This is what has been undertaken by START through asking us to share our detailed knowledge of anaerobic digestion during the ProGREEN Fellowship program's technical workshops.

Inform our policies on what biomass energy can bring to the energy mix.. A large emphasis is placed on solar photovoltaic. Therefore, further explanation will be needed on how bioenergy (methanization and gasification) are so conducive to the economic and social development of our countries. This will include the topic of natural automobile biogas, or BIOGNV, the use of biogas as a cooking fuel, and the numerous agricultural advantages of organic fertilizers over chemical fertilizers.

Convince by example by putting at least one industrial biodigester in all of our cities and alongside major organic waste production sites, including in wholesale markets and slaughterhouses.

These are ways in which the biodigester is at the center of two transitions—an energy transition and an agroecological transition—that can help us extract ourselves from these severe crises we face. Giving bioenergy the attention it deserves would be extremely beneficial for our so-called developing nations.



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[1] Expression bien de chez nous qui signifie que la personne est inflexible

[2] COMODAFRICA.- Le Guide de l'information sur le business des engrais en Afrique de l'Ouest ; 28 Mars 2022 ; WEB DOC

[3] Les engrais organiques.



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