



African Scientists & Entrepreneurs towards the BioEconomy Era

Session at the Civil Society Policy Forum

April 11-15, 2016 - IMF / World Bank 2016 Spring Meetings

Practical Info

Wednesday April 13 from 4.00 to 5.30 pm.

Civil Society Space of the Spring Meetings (**World Bank, I Building, Washington DC**). Room numbers will be shared in coming days.

Link to the Civil Society Policy Forum Event:

<http://www.worldbank.org/en/events/2016/04/11/civil-society-policy-forum#3>

Please note that sessions are open to all participants who have been accredited to the 2016 Spring Meetings.

Concise outlook of the event

African Scientists & Entrepreneurs Towards the Bio Economy Era

Young African researchers, fully involved in advanced research in the environmental and white biotechnology, as well as successful leaders of green start-ups and other forms of green entrepreneurialism will be convened by the Africa-Europe Alliance for KBBE (<http://www.artes-research.com/en/portfolio-articoli/kbbe-partnership-agreement/>).

This Partnership brings together prominent public and private research bodies as well as business representatives to promote BioEconomy. The aim of the session is to present best practices, share innovative ideas, and propose strategies for an effective cooperation in green, growth among research and business worlds in Africa. The session will be an inclusive and participatory exchange among all the persons involved.



Panellists:

Paola Agostini - Lead Environmental Economist in the World Bank's Environment and Natural Resources Global Practice;

Lilia Infelise - President of ARTES;

Cara E. Jones - PhD / Assistant Professor in Political Science at Mary Baldwin College;

John Manirakiza - Assistant project manager on the University of the District of Columbia (UDC) NESARE Program on Ethnic Crops;

Déo Gratias Nkinahamira - President of Africa Renaissance Time;

Tomaso Trombetti - Associate Professor at the Department of Civil, Chemical, Environmental, and Materials Engineering.

Background

The developing world needs to create 350 million jobs in the next decade, especially for women and youth, just to keep pace with the working-age population. Africa needs 11 million new jobs each year, as its working-age population expands by 30%. The majority of those jobs have to come from the private sector.

The "BioEconomy" intends to address world-wide issues such as climate change, food safety and insecurity and natural resources shortages, by fostering production and therefore occupation in the green industries, both in developed and developing countries.

The session urges the need to prevent a misleading implementation of the BioEconomy agenda which privileges interest of strong economies and actors and neglects its fundamental original principles: involvement of all stakeholders and global sustainable management of natural resources.

The risk is that the benefits from the shift from an economy based on fossil fuels to an economy based on biomasses will be seized almost exclusively by the already developed economies and by the big corporations, excluding once again the developing countries and putting even more pressure on the small-medium local producers (especially in the agricultural sectors).

On the other hand, the BioEconomy could be an alternative path for development of not-yet industrialised countries, as it represents a feasible solution for decoupling economic growth and increasing environmental pressure.

Since we are still at the beginning of this historical socio-economical transition, this is the right moment to questions ourselves on the best strategy to implement, calling for an equal and fair cooperation among European and African countries, historical allies.



It is vital for African governments to include in their agendas an integrated multidisciplinary strategy for exploring the possibilities entailed in the BioEconomy, and to be able to stir the wheel of global decision makers towards a direction that reflects their own needs and visions. Nonetheless, contrary to the grown economies in Europe, North America, Asia and Latin America, there is no country in the whole African continent (a part from South Africa) which has implemented a dedicated strategy for BioEconomy.

Moreover, it is fundamental that governments, especially from Africa, integrate some key topics in their strategies for growth, connecting them to the objectives of BioEconomy, such as diversification of agricultural production, agroecology principles, preservation of biodiversity and social inclusion.

It is equally vital to channel the huge development aid resources toward BioEconomy shared agenda and becomes of outmost importance to mobilise the commitment of all societal actors and especially those involved in the field of MSMEs policies and programmes, traditionally marginally involved in the development aid system of intervention.

Moreover, in the African continent it is vital to build a strong cooperation between the scientific and education system and the local new generation of entrepreneurs, committed and competent to sustainably use of renewable biological resources, from land and water, to produce food, bio-materials and bio-energy.

The commitment of the promoter of the session debate, the “Africa & EU Alliance in the era of Bioeconomy”, which involves prominent centres of expertise in the fields of green technologies and business development services, is to join forces to build shared teams and laboratories in such a way that the solutions for a responsible and sustainable utilisation of the resources would also be joint. Still too many think that it is possible to transfer pre-made know-how from the more advanced economies, and still too many are ready to build structures and physical infrastructures, but not to share the knowledge and the know-how.

Session format

The session will bring together young African researchers, fully involved in advanced research in the environmental and white biotechnology, as well as successful leaders of green start-ups and other forms of green entrepreneurialism. **The session will be highly interactive.** A selected group of speakers will introduce the session and facilitate the discussion. **All participants will be encouraged to present best practices, share innovative ideas and propose strategies for an effective cooperation of the research and business worlds in Africa.**

One of the aim of the session will be to set the foundations of a cooperation platform among young scientists and entrepreneurs from Sub Saharan Africa, living in the African home countries and abroad, fully aware of the Knowledge Based BioEconomy as the right pathway for sustainable



growth (fast job and eco-friendly MSMEs creation). This network will be the starting point to create an enabling environment for development and application of BioEconomy in Africa, and would guarantee a stable cooperation and benchmarking with the most advanced realities in the rest of the world. The network will have to overcome sectoral and disciplinary boundaries and the members will have to share the same social responsibility principles.

Program

<i>Title</i>	<i>Abstract</i>
<p>The great challenge of BioEconomy: designing the foundation of a new civilisation. The contribution of fragile regions empowered by science and technology.</p> <p>by Lilia Infelise, Founder and Scientific Director of the ARTES Institute (Italy)</p> <p>International Secretary of the Africa-Europe Alliance for KBBE in Bologna, Italy.</p>	<p>The economic indicators, the climate change, and the exhaustion of the vital natural resources are imposing to re-design the foundation of our civilisations. A word seems to reassume the foundation of the new model: BioEconomy, seen as a comprehensive approach to address the ecological, environmental, energy, food supply and natural resource challenges that the planet are facing today. Science & technology advancements are key enablers as well as a new generation of entrepreneurial subjects.</p> <p>The global dimension of the societal challenges that the BioEconomy is intended to address requires fully re-designed development cooperation models (with new funding targets and instruments) as well as engaging territories and communities, according to specific participatory models.</p> <p>Sub Saharan Africa scientists, researchers and young generation entrepreneurs could play a vital role in ensuring the protagonist role of Africa, but proper and huge investment are needed.</p>



Africa entering the BioEconomy era: pioneering intervention in the Lake Tanganyika basin.

by Deo Gratiás
Nkinahamira, Founder and
President of Africa
Renaissance Time
(Burundi)

International Secretary of
the Africa-Europe Alliance
for KBBE in Bujumbura,
Burundi.

It will not be possible for Africa to mitigate the negative impacts of climate change and enter the BioEconomy era without developing robust tangible and intangible scientific and technological infrastructures, but also without involving the whole population through proper community regeneration programmes.

The Alliance Africa - Europe for the BioEconomy has developed a framework programme, which translates this goal into an exemplary pilot intervention.

This pilot intervention is to be implemented in the region of the Lake Tanganyika Basin, a unique hub of natural resources, but at the same time home of endemic conflicts and extreme poverty.

The project envisions the implementation of a BioRegion with full valorisation of research, high education infrastructures and duly devised programmes of fast job and enterprise creation.

Resilient Landscapes to Reduce Fragility, Conflict and Migration

By Paola Agostini,
Program Coordinator GEF,
TerrAfrica, REDD+, Senior
Environmental Economist
at World Bank (US)

Resilient landscapes contribute to the achievement of multiple SDGs including: No Poverty, Zero Hunger, Climate Action, Reduced Inequalities, Life on Land, and Peace, Justice and Strong Institutions. Yet investing in increasing the productivity and governance of natural systems is often the last thing on the mind of decision makers faced with crisis. As a result, land, forest, water and ocean resources are used and abused as temporary safety nets – for jobs (in post-war situations, when former soldiers trade guns for chainsaws and fishing nets), or indeed for shelter, when displaced people flee conflict and need places to pitch their tents. We need to turn this situation around and lay the foundations for long-term resilience. This intervention will help to understand the relationship between land degradation and fragility, conflict and migration; position the landscape approach as a key tool to reduce fragility, conflict, and migration through sustainable environment and natural resources management; Illustrate the role of the private



sector to reduce fragility, conflict and migration through the promotion of sustainable and resilient landscapes.

**Participatory
democracy,
stakeholders, and civil
society in the
BioEconomy era**

What role can local stakeholders and Civil society participants play as Africans move forward in the 21st century?

New processes, forms of politics, and economic opportunities provide for new voice, but also new challenges. Navigating this space requires creativity, flexibility and support.

How can donors respond?

By Cara E. Jones, Assistant
Professor of Political
Science at Mary Baldwin
College (Virginia, US)

**Research between
cutting edge
innovation and local
resources & tradition:
the contribution of
the university for a
sustainable
development through
shared know-how**

The reliability and safety of building design, the economical sustainability of constructions and a wise urbanisation planning are fundamental factors of a country's development. The Department of Civil, Chemical, Environmental and Materials Engineering of the University of Bologna is a multidisciplinary centre of excellence for technology and research, which, from the beginning of 1900, is contributing to the creation of the norms regulating safety and reliability of buildings and to the diffusion of the culture and knowledge of construction technologies in Italy.

In 2015, DICAM has started the cooperation with the transnational network initiated by ARTES, with the aim of transferring cutting edge researches as applied to local resources and traditional knowledges for the establishment of a Research Centre on Civil Engineering Technologies and Construction Materials in Bujumbura, to regulate and sustain the building construction industry in the whole EAC area.

by Tomaso Trombetti,
Associate Professor at
DICAM, University of
Bologna (Italy)



How can African Diaspora play a role, in Advocacy for inclusion in the Bio- Economy: exemplary experiences

By John Manirakiza,
Consultant at Wasafiri
Consulting (US) and
Assistant Project Manager
on NESARE Program on
Ethnic Crops

The growing African Diaspora in America is among the most skilled professionally and significantly contributes to the economic development of Africa through investment, remittances, transfer of knowledge and technology for education, health and employment opportunities. In light of the new challenges associated with the fossil full-based economic model, Africa will need to work with all stakeholders including the US based African Diaspora in the search for sustainable solutions for an equitable and inclusive Bio-economy. Exemplary initiatives by African Diaspora will play a greater role in the creation of a new and equitable, efficient and environmentally sound economy.

Participatory Session

Q&A, Interventions from the public: best practices, policy proposals, suggestions and innovative ideas....