African Biosafety Network of Expertise (ABNE)

Africa Biosafety Watch

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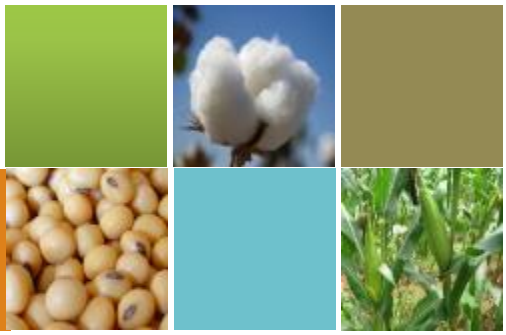

NEPAD Agency CEO visits NEPAD's West Africa Regional Office

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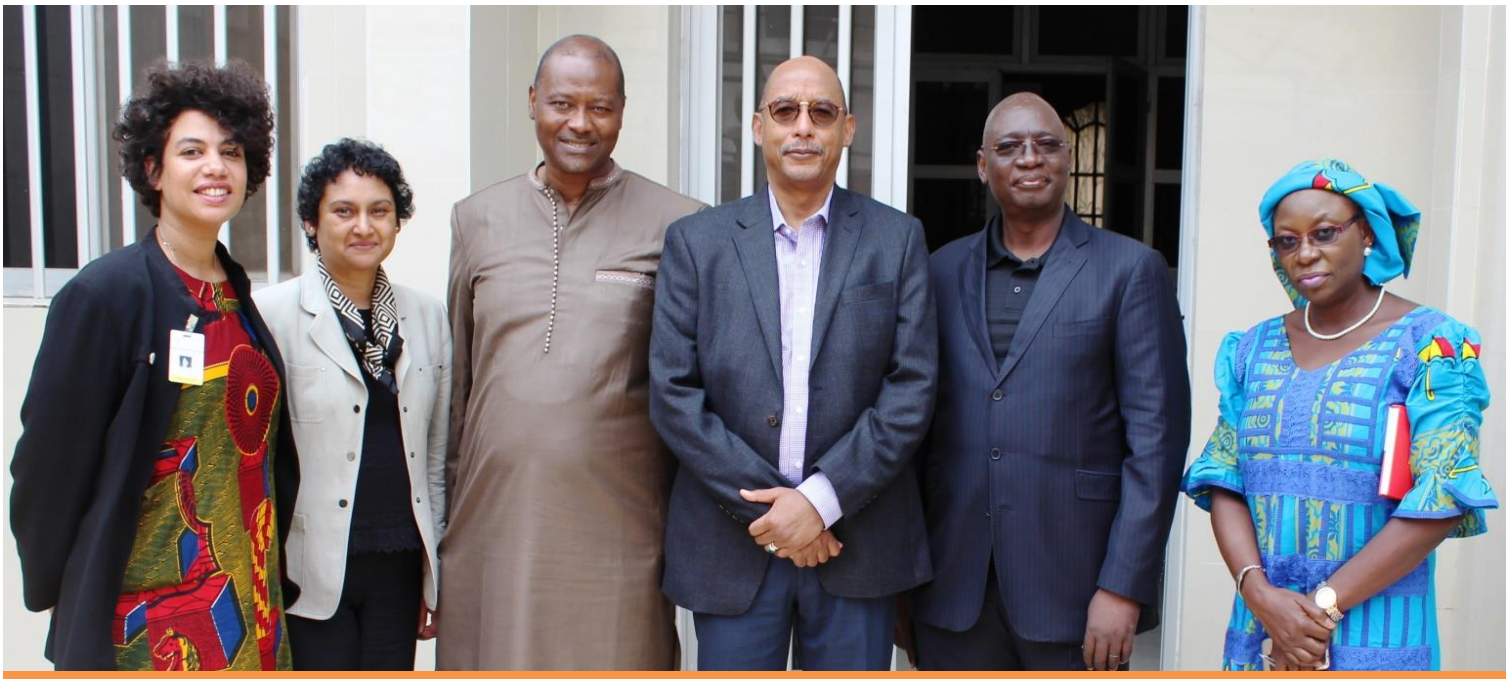
NEPAD Agency CEO, Dr Ibrahim Hassane Mayaki, paid a visit to NEPAD's West Africa regional office in Dakar on the sideline of the tenth joint annual meetings of the African Union Specialized Technical Committee on Finance, Monetary Affairs, Economic Planning and Integration and the Economic Commission for Africa's Conference of African Ministers of Finance, Planning and Economic Development, which was to take place from 23 to 28 March, 2017.

The CEO was accompanied by Ms Sarah Lawan, Lead Manager of The Sustainable Development Goals Center for Africa and Ms Pamla Gopaul from the Office of the CEO.



From right to left are Ms Sarah Lawan, Ms Pamla Gopaul, Mr. Amadou Diallo, Dr Ibrahim Assane Mayaki, Dr Jeremy Ouedraogo and Mrs Mariam Ouedraogo Seynou

Dr. Mayaki was welcomed by Dr. Jeremy Ouedraogo, Head of the Regional Office and some of the NEPAD staff in Dakar. This visit was an opportunity for the CEO to see the new premises which staff will be moving to by the end of March, 2017.

Dr Mayaki, expressed his satisfaction with the new office and encouraged staff to closely work with the head office for more effectiveness and visibility of NEPAD action in the continent.

Meeting with the Committee for Science and Technology of the Uganda Parliament

NEPAD Agency ABNE was invited to present its views on the Uganda National Biotechnology and Biosafety Bill 2012 (NBBB), to the Committee for Science and Technology of the Uganda Parliament (PCST) in North Wing of the Parliament Building. The team was led by Sunday Akile, the legal expert accompanied by Silas Obukosia and Wolde Sinebo.

They took the opportunity of this presentation to highlight the strengths of the bill that is clearly in line with international related protocols and also with Agenda 2063 as a collective vision and roadmap of the African Union for the next fifty years.

The content of the presentation also included the role of ABNE in biosafety in Africa, the definition and interpretation of NBBB, the institutional Framework, the separation of greenhouse/laboratory approval from CFT, MLTs and general release approval, provisions on expedited reviews of applications, risk and safety assessment, restoration order, period taken for a determination to be made on an application.

Concurrent with ABNE presentation were presentations from the Uganda Cotton Development Authority (CDA) and Uganda National Environment Management Agency (NEMA).

Participants during the meeting with the Committee for Science and Technology of the Ugandan Parliament

Uganda scientific community has been struggling to get the revised biosafety bill passed since 2012, to allow safe and effective implementation of biotechnology and biosafety in the country. Uganda is one of the African

countries that have done the most diverse and successful confined field trials (CFT) of genetically modified food commodities.

CFTs implemented in the country mainly target banana, maize, cassava, cotton, rice, and Irish potato. Yet these trials could not go beyond this stage, as the existing law in the country allows only the conduct of GMO research. It does not provide for processes beyond research such environmental release of GMO other than for research purposes.

Recently, there has been high level political advocacy urging the Parliament to enact NBBB 2012 to allow the country to safely harness science, technology and innovation opportunities to meet climate change, food security and socioeconomic development challenges.

Functional biosafety systems enable safe development of biotechnology in Swaziland

NEPAD Agency ABNE in partnership with the Common Market for Eastern and Southern Africa (COMESA) and the Swaziland Environmental Authority organized a training workshop on Risk Analysis and Regulatory Compliance Monitoring and Inspection for GMOs, from 27-29 March, 2017 in Ezulwini, Swaziland.

The objectives of the training were to build capacity of the Swaziland Environmental Authority on Risk Analysis covering assessment, management and communication aspects. Twenty-five biosafety regulators and research officers took part in this training workshop.

Group photo of part of participants

In his official opening remarks Mr. Isaac Dladla, the Acting Executive Director of the Swaziland Environment Authority (SEA), described the training as timely coming at a time when Swaziland was preparing for a parliamentary hearing on the draft amended biosafety Act. In his remarks, Seemilo Mavimbela, representing the Chairperson of the National Biosafety Advisory Council (NBAC), said his organization's role was to advise SEA

on biosafety issues to find a balance between environmental protection and the safe use of modern biotechnology. He said the NBAC had advised on the approval of field trials on Bt cotton in 2016 and thus the workshop would further enhance confidence for similar advice.

The Principal Program Officer at the NEPAD/ Africa Biosafety Network of Expertise (ABNE), Dr. Silas Obukosia, underlined that Malawi, Ethiopia, Nigeria and Swaziland are in advanced stages of approving agri-biotech products. "This progress requires continuous regulatory capacity building, and this workshop is part of that capacity building objective in Swaziland," he added.

COMESA Senior Biotechnology Policy Advisor Dr. Getachew Belay commended Swaziland for the progress it has made in creating an enabling policy and regulatory environment

The workshop included field visits to Bt cotton confined field trial sites at Malkerns Research Station and also at Big Bend experimental station and Buseleni cotton farms.

Swaziland started insect resistant Bt-cotton field trials in 2016 and the trials permits are valid until December 2017. The seed varieties used for the Bt trials are a local one called Alba plus and also Indian varieties and the trials would help evaluate gene efficacy and agronomic performances in local conditions. If these trials prove successful, Swaziland may go for Bt cotton general release and commercialization in the near future.

A network of informed Lawyers for functional biosafety regulations in Africa

The African Biosafety Network of Expertise (ABNE) of the African Union's NEPAD was established 7 years ago to support African countries in their efforts to implement functional biosafety systems. This network has been since then working in six major thematic areas including food safety, environmental biosafety, agricultural biosafety, legal and policy matters, socioeconomics implications and biosafety communications.

After a five-year programme successfully implemented that mainly focused on stakeholders awareness and capacity building the second phase of the ABNE programme has shift gears and is more networking with national experts for more effective implanting of the biosafety component in target countries. NEPAD Agency ABNE builds on established effective working partnership with local government biosafety constituencies to identify and maintain a pool of experts in each country in the six thematic areas.

One of the most outstanding networks put in place put in place with the support of ABNE is the lawyers' network launched in July 2015 in Accra, Ghana.

The main goals of this network include strengthening the capacity of African Lawyers and legal practitioners in Biosafety regulations to enable them to support the development and enforcement of workable Biosafety regulations and guidelines. Well trained and informed members of the network become also resource people and provide much needed counsel to competent national authorities and institutions that may issue approvals for the conduct of biotechnology research experiments and the placing of biotech products on the market in Africa.

Mr. Arouna Ouedraogo from Burkina Faso

Besides the foregoing, there will be ready and adequate legal support when administrative and judicial legal challenges rise against the government and other stakeholders.

Legal practitioners and lawyers involved in this initiative are very excited about the network and have clear expectations in mind: “This network allowed those dealing with regulations to better understand the situation because it’s not always obvious that lawyers are aware of the different cases that happened abroad. With this training and the sharing of experience, we are able to realize the realities in other countries”, said Arouna Ouedraogo, Legal Expert at the National Biosafety Agency in Burkina Faso.

Mrs. Grace Mbrokoh-Ewoal from Ghana

The network has been an eye-opener for me, especially because before I came to the different meetings, my knowledge about biotechnology was very limited. Here I have learnt a lot of things especially concerning intellectual property rights (IPR). I would encourage that a lot more lawyers on the continent can attend and so the network will continue to expand”, added Mrs. Grace Mbrokoh-Ewoal, Principle State Attorney, Ministry of Justice, Ghana.

One of the key achievements of the African biosafety lawyers’ network was their effective contribution to support the government of Ghana in a court case against anti-GMO activists. The government eventually won the case and the implementation of biotech and biosafety activities is back on track in the country.

Group photos with Eastern and Southern Africa lawyers on right and Lawyers from West Africa on right

From the initial twelve members at the launch of the network, the Biosafety Lawyers network in Africa counts today more than 50 members across the continent. It is expected that it keeps expanding, through the process of trainees becoming trainers in their own countries. The resources provided by both international resource persons especially from Michigan State University and those from the NEPAD Agency to the participants were very valuable to the satisfaction of all the participants.

In addition to the Lawyers network, NEPAD Agency ABNE is contributing to the functioning of three other African specific networks launched under the auspices of NEPAD including the Association of National Biosafety Agencies in Africa, the Environmental Biosafety Network, and the Food Safety Network. Two new networks of experts will be launched this year, the Biosafety socioeconomic network and the Biosafety communication network.

Ethiopia’s Breakthrough on agri-biotech research and biosafety

Ethiopia is the second-most populous country in Sub-Saharan Africa with a population of 99.4 million, and population growth rate of 2.5% in 2015. The country is also one of the most deprived in the world with an income per capita lower than the regional average according to the World Bank statistics. However, the economy has experienced strong and broad based growth over the past decade, averaging almost 11% per year from 2004 to 2014.

Agriculture in Ethiopia is the foundation of the country's economy, accounting for half of gross domestic product (GDP), 84% of exports, and 80% of total employment. More and more however, the country strives to cope with periodic droughts and soil degradation caused by overgrazing, deforestation, and high population density.

A large part of the land in Ethiopia is dry and degraded. It is estimated that around 62,000 ha of woodland are lost every year due to extensive and slash-and-burn agriculture.

Agriculture in Ethiopia is the foundation of the country's economy, accounting for half of gross domestic product (GDP), 84% of exports, and 80% of total employment. More and more however, the country strives to cope with periodic droughts and soil degradation caused by overgrazing, deforestation, and high population density. Cotton production is still behind other crops like coffee or cereal but the development of the textile industry is a priority of the Ethiopian government in their economic growth strategy and in 2006, the government implemented an important privatization initiative to attract foreign and private enterprises to develop the sector. However, the cotton sector is currently facing critical challenges due to pest attacks, and the production of conventional cotton, despite intensive use of pesticide, could not meet the needs of the flourishing textile industry.

Cotton pests are causing big losses to farmers in Ethiopia

Ethiopia, therefore, has been looking at other production methods in the last few years and is particularly interested in plant breeding techniques and biotechnology solutions experimented in other parts of Africa and the world. "Cotton is becoming very important in Ethiopia because of the expanding textile industry. However cotton production is facing a major problem due to pest attacks mainly by the African bollworms and other sucking insects" affirmed Dr. Endale Gebre, Director for agricultural biotechnology research in the Ethiopian Institute of Agriculture Research (EIAR).

"Bollworms being the major threat on cotton production in the country, we are now trying to screen varieties that are resistant to this pest thanks to the Bt trait incorporated in the plant. We are doing that under rainfed and irrigated conditions across the country. We are trying to see how the insect resistance is effective under field conditions here at Werer. It will be very important because if we can have good efficacy in the Bt trait incorporated varieties and hybrids, it means it will be possible to significantly reduce insecticide use," he added.

NEPAD Agency ABNE has been engaged in the biosafety process in Ethiopia. ABNE especially partnered with Ethiopian stakeholders and other organizations on biosafety capacity building and because of these joint and successive efforts, the country has revised its biosafety proclamation and worked on improving its biosafety directives. As these biosafety instruments have been put in place, now Ethiopia has been able to introduce Bt cotton technology from different sources and has started testing the technology in six different agro-ecological zones.

"We can say that NEPAD Agency ABNE has a productive partnership with Ethiopia and this has

Dr. Endale Gebre, EIAR, Ethiopia

Ethiopian biotechnology scientists explaining the results of Bt cotton confined field trials to a team from NEPAD agency ABNE and MSU during a field visit at Werer agricultural research center.

started bearing fruit. It is amazing that Ethiopia has made so much progress in such a short period of time," said Dr. Woldeyesus Sinebo JINORE, Senior Program Officer at NEPAD Agency ABNE.
At the Werer agricultural research center, seven cotton varieties are being tested; two from Ethiopia as local checks, three from Sudan with Bt gene, and two from India also with Bt gene. NEPAD Agency ABNE and MSU have been working together to build the capacity of Ethiopian experts to effectively conduct the CFTs following international norms and standards.

"This has been a great partnership between the government of Ethiopia and Sudan and also the private sector from India. We believe in south-south collaboration. This is a perfect example of how countries in Asia and countries in Africa are working together, with also the support of institutions like the NEPAD Agency," said Karim Maredia, Director of World Technology Access Program at Michigan State University.
If the CFTs show good results, Ethiopia plans to release Bt cotton in the near future. "We have started this activity for about five to six months now. So we will analyze our records on the different sites to understand what has happened and how good are those parameters we are interested in, in terms of yield, in terms of resistance, in terms of lint quality and so on. If the data show good results in the different research centers, we might apply for release in the next year but if there is a need for additional re-testing of the variety, we might go for another season of multi locations trials," said Dr. Endale Gebre.

NEPAD Agency ABNE and its partners will continue to build stakeholders' capacities in the country especially in the safe technology release process to support the country in its attempts to effectively harness opportunities from science, technology and innovation for the development of the country.

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