USDA Foreign Agricultural Service
GAIN Report
Global Agricultural Information Network

Required Report - public distribution

Date: 11/29/2016

GAIN Report Number:

Senegal

Agricultural Biotechnology Annual

2016 Francophone West Africa Biotechnology Report

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Report Highlights:
On July, 26, 2016, The President of Cote d'Ivoire announced the implementation of the national biosafety law adopted by the parliament on July 1, 2016. Senegal is revising its biosafety law, and expects to submit the final draft to the parliament for adoption by the end of December 2016. Burkina Faso did not plant GE cotton in MY2016/17 due to the unresolved problem related to a short fiber length. In April 2016, the ABNE main office in Burkina Faso was relocated to Dakar, Senegal.

Section I. Executive Summary:

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Section I. EXECUTIVE SUMMARY

On July 1, 2016, the Ivoirian parliament finally adopted the national biosafety law. The law is now awaiting Presidential promulgation.

Senegal continues to revise its national biosafety law. In the meantime, the National Biosafety Authority (NBA) through outreaches is engaging stakeholders, including the general public, university researchers, students and cotton producers, to sensitize them to the benefits of adoption and use of biotechnology. The NBA hopes to complete the process and submit the revised biosafety law to the parliament for adoption in December 2016.

Section II. PLANT AND ANIMAL BIOTECHNOLOGY

Chapter 1: Plant Biotechnology

Part A: Production and Trade

a) PRODUCT DEVELOPMENT

Only Burkina Faso has ongoing activities in product development; they are conducting field trials on:

- Stacked Bollgard II x Roundup Ready Flex (insect and herbicide tolerance)
- Bt Cowpea (insect resistance to Maruca Vitrata)
- Bt maize approved for first confined field trial in 2016

b) COMMERCIAL PRODUCTION

Bt cotton remains the only crop commercialized in Burkina Faso and Francophone West Africa. However, it was not planted in MY2016/17 due to unresolved issues between Monsanto and the cotton stakeholders regarding the shorter fiber length.

c) EXPORTS

About 98 percent of cotton fiber from Francophone West African countries is exported mainly to Asia.

d) IMPORTS

There is no official record of GE product imports across the region as it is difficult to monitor, as the Reference Laboratories in West African Economic and Monetary Union (WAEMU) do not have the proper input to detect the presence of GE products in products.

e) FOOD AID RECIPIENT COUNTRIES

Burkina Faso, Mali, Cote d'Ivoire, and Senegal are food aid recipient countries in Francophone West Africa.

f) TRADE BARRIERS

There are no current or pending trade barriers. Importers should follow the regulations based on the country's biosafety law.

PART B: POLICY

a) REGULATORY FRAMEWORK

Burkina Faso

In Burkina Faso, the National Biosafety Authority (NBA) is a legal independent agency which does not depend on any Ministry as compared to other Francophone NBAs.

The NBA is a public organization whose members are state officials. Its role is to:
- issue notification and assessment forms
- receive request for authorization to use, import, or export GMOs and deliver permit

The NBA has two advisory bodies to assist in its daily tasks: the National Biosafety Scientific Committee (NBHC) and the National Biosafety Observatory (NBO). The NBHC is responsible for assessing the socio-economic risks of GE products. It is composed of twelve members chosen on the basis of their profile and their recognized expertise. The NBO consists of 33 members (10 from the Public Administration and 20 from the Civil Society). Its role is to ensure that GE products are used in accordance with stipulated laws. It also has the responsibility to inform and raise awareness on biosafety issues.

Regional Initiatives
In 2015, a common biosafety law for WEAMU countries was validated by ministries in charge of environment, agriculture, animal resources and fisheries, and scientific research from member states. However, the law is awaiting adoption by the member States.

Mali

The Malian biosafety law was signed in December 2008. The law gives authority to the *National Competent Authority* (NCA) under the Ministry of the Environment to monitor and control the implementation of the law. The Ministry of Environment is in charge of approving activities involving GE and their products. The NCA's institutional framework is composed of three committees:

- Risk and assessment committee
- Public participation committee
- Regulations and legal committee

A decree allowing GE research tests was signed in 2009 but no tests have been done so far.

Senegal
The National Biosafety Authority (NBA) continues to review and revise the National Biosafety Law signed in 2009. Two sessions comprising select stakeholders were organized to review and amend the law, and a third one is scheduled to convene by the end of calendar year 2016 for all stakeholders to validate the revised law. The NBA hopes to complete the process and submit the revised law to the government by the end of December 2016. The next steps are adoption of the law by the parliament and the signing of the law by the president.

The revised law is expected to integrate:
- the 2010 Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety, which Senegal ratified in January 2012
- The regional biosafety law

The revised law will also be translated into six different local languages.

In 2016, the NBA organized biosafety awareness sessions at Universities in Saint Louis and Bambey for students and professors to increase their knowledge on biosafety.
The NBA is composed of 17 members from different ministries and the President's Officey. The Executive Director and members of the NBA are appointed by Ministerial Order.

The National Biosafety Committee (NBC) is responsible for risk assessments related to the import, export, handling, transit, confined use, release or launching of GMOs or derived products. Its 30

members consist of scientists, the public and private sectors, and members of the general public.

In April 2016, the African Network of Biosafety Expertise (ABNE) main office was relocated to Dakar, Senegal from Burkina Faso. The move, which provides Senegal easy access to biosafety information, could also facilitate the adoption of biosafety regulations in Senegal.

Cote d'Ivoire

On July 26, 2016, the President of Cote d'Ivoire signed the national biosafety law after its adoption by the parliament on July 1, 2016.

The law aims to ensure an adequate level of protection of human and animal health, biodiversity, and environment against the potential risks associated with use of modern biotechnology and derivatives while safely utilizing the technology for its benefits.

The national biosafety framework has a National Biosafety and Biosecurity Commission (CNBIOS) and a National Biosafety Observatory (ONBIOS). The function and attributes of the two organizations are yet to be defined by ministerial decree.

The biosafety law requires that all GE and derived products be authorized prior to being sold in the country. Products should be packed and labelled as specified in the established ministerial decree.

The Ministry of Environment (MOE) provides information to the public via the ONBIOS notification documents as well as assessment reports. The public has 30 days to make observations and comment on the MOE.

Requests for imports and exports of GE products are to be submitted in advance, except for those that are in transit, or intended to be used by researchers in confined field trial, directly for human and animal consumption, or to be processed.

All imported or exported GE plants and derived products should be placed in quarantine before dissemination, commercialization, and all other usages.

The CNBIOS has a list of documents that should be completed by all importers or any one requesting to import GE products. The requested information includes:

- The taxonomy, ecological and reproductive behavior of the GE organism and its derived products
- The donor, the recipient organization, the vector and the gene introduced.
- The risk from the gene when transferred to other organisms as well as the type of accidental dissemination it may cause and its method of usage.

In case of accidental dissemination, the permit holder should inform the CNBIOS in writing and provide all necessary documents. An emergency response plan will be put in motion at the applicant's expense.

The competent authority will seize all GE plants and derived products if disseminated fraudulently.

For more information on the national frameworks, please visit the 2010 GAIN report:
http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Biotechnology%20-%20GE%20Plants%20and%20Animals_Dakar_Senegal_7-15-2010.pdf

b) APPROVALS
The only country in francophone West Africa that has approved a GE crop for cultivation is Burkina Faso. Bt cotton Bollgard II, developed by Monsanto in collaboration with the National Institute for Agricultural and Environmental Research (INERA), is the only GE crop approved and registered in Burkina Faso for cultivation since 2008.

c) STACKED EVENT APPROVALS
Burkina Faso is conducting field trials for stacked Bollgard II Roundup Flex Bt cotton for herbicide and insecticide tolerance.

Stacks currently do need to be approved separately in each county.

d) FIELD TESTING
Only Burkina Faso does field testing for GE crops.

Burkina Faso: Burkina Faso is conducting field tests on Bt cowpea resistant to the *Maruca Vitrata.* Bt maize confined field tests was approved in 2016.

Cote d'Ivoire: There are no field trials in Cote d'Ivoire. However, confined field trials are defined at four level of security (1 to 4) depending on the risk to human and animal health, and environment. Each level is defined by the Ministry of environment under the proposition of the CNBIOS. The CNBIOS may change the level of security mentioned on the documentation submitted by the user and explain the reason why.

GE and derived products under the level of confinement 2 to 4 are subject to an agreement with the competent authority while the other (level 1) is only subject to a declaration. An authorization is required prior to conducting open field trials.

The modalities defined for an agreement, declaration, and authorization are defined by the Council of Ministries via a decree.

e) INNOVATIVE BIOTECHNOLOGIES
Post is not aware of significant discussion on innovative biotechnologies.

f) COEXISTENCE

In Burkina Faso, the coexistence between Bt and conventional cotton has been established at a ratio of 80 percent for Bt cotton and 20 percent for conventional cotton.

g) LABELING

Burkina Faso
The biosafety law requires that any GE product intended for distribution or marketing in the national territory must be packaged and labelled in an indelible and non-modifiable manner in order to ensure the protection of ethical and cultural values and to avoid any risks to the environment as well as human and animal health.

Also, all GE products developed in the national territory shall be packaged and labelled by the producer or the dispatcher with the indication "Produced on the basis of genetically modified organisms" or "Containing genetically modified organisms" in conformity with complementary standards defined by the competent national authority in cooperation with other departments concerned. The terms of labelling are established on the basis of a decree adopted by the Council of Ministers.

Senegal
The law states that all GE products used for direct animal or human food or for transformation or introduction into the environment should be labeled "contains GE".

Mali
The law has provisions covering the import, export, transit, contained use, and release or introduction into the market of any GE products, be it for pharmaceutical, food, feed or other agricultural proposes. There is also provision in the law for mandatory labeling for all products made from GE ingredients.

Cote d'Ivoire
The national biosafety law requires that all GE plants and derived products for intentional consumption, import or export should be packed and labelled in an indelible and non-modified manner.

The label should indicate: "Containing genetically modified organisms"

h) MONITORING AND TESTING
WAEMU countries have not yet started testing GE products even though each country has adequate equipment.

i) LOW LEVEL OF PRESENCE POLICY

Countries do not have a policy on low level presence.

j) ADDITIONNAL REQUIREMENTS
At the national level, all WAEMU countries need to comply with the harmonized regulatory framework, particularly for seed, quality control, certification and variety release.

For additional information, please visit
http://www.fao.org/fileadmin/templates/agphome/documents/PGR/PubSeeds/HarmonizedSeedsEng.pdf

k) INTELLECTUAL PROPERTY RIGHTS (IPR)
The *African Intellectual Property Organization* (OAPI) regroups comprises 15 African French-speaking countries. Among them, Burkina Faso, Guinea, Guinea-Bissau, Ivory Coast, Mali, Mauritania, Niger, Senegal and Togo. These countries are treated as one state regarding trademark law. Apart from OAPI, there is no national trademark law in the member states. Therefore, it is not possible to obtain national registrations in these countries. Trademark protection is obtained via registration. It is valid for 10 years from the date of the application and renewable for the same period. Foreign applicants need a local agent. A non-legalized power of attorney is sufficient.

All GE and derived products from natural, created or modified biological materiel in Cote d'Ivoire can only be commercialized in the international market if there is a pre-approved authorization from Cote d'Ivoire based on a fair and equitable sharing of benefits arising from its utilization, including commercialization.

l) CARTAGENA PROTOCOL
Mali ratified the Cartagena Protocol in September 2003.

Senegal ratified the Cartagena Protocol in January 2004.

Cote d'Ivoire ratified the Cartagena Protocol in June 2015.

Burkina Faso ratified the Cartagena protocol in November 2003.

For more information on each country's implementation stage, regulations, and capacity building needs, please refer to https://bch.cbd.int/protocol/parties

m) INTERNATIONAL TREATIES/FORA
Mali, Burkina Faso and Senegal are members of international organizations including FAO and Codex Alimentarius.

n) RELATED ISSUES

Biotechnology research in Burkina Faso is related to pest resistance (Bt cotton, Bt cowpea). For nutrition (bio fortified sorghum), and food security (hybrid corn).

Part C: Marketing

a. PUBLIC/ PRIVATE OPINIONS

While stakeholders generally support GE crops in Burkina Faso, they are dissatisfied with the fiber length of Bt cotton. For MY 2016/17, farmers and other cotton stakeholders decided not to plant Bt cotton until the problem of the short length fiber is resolved with Monsanto. The government is generally supportive of the technology though, and may want to see a "fix" to the shorter fiber length of the Bt cotton variety.

b. MARKET ACCEPTANCE/ STUDIES

Bt cotton is the only GM crop commercialized in francophone West Africa countries. It was widely used by farmers who are generally satisfied despite the short length of the fiber. The use of Bt cotton reduces labor input and improves health due to the decrease in pesticides use. Bt cotton seed is more expensive relative to the conventional seed but it is compensated by the reduced amount of insecticides purchased by the farmers. Several other countries such as Cote d'Ivoire and Mali are also willing to adopt Bt cotton. However, their current biosafety laws are being developed.

Post is not aware of any marketing studies in the countries covered.

Chapter 2: Animal Biotechnology

PART D: PRODUCTION AND TRADE

a. PRODUCT DEVELOPMENT

There is no development on animal biotechnology.

b. COMMERICAL PRODUCTION - N/A

c. EXPORTS - N/A

d. IMPORTS - N/A

e. TRADE BARRIERS – N/A

PART E: POLICY

a. REGULATORY FRAMEWORK
There is no regulatory framework for animal biotechnologies.

b. INNOVATIVE BIOTECHNOLOGIES – N/A
c. LABELING AND TRACEABILITY – N/A
d. INTELLECTUAL PROPERTY RIGHTS (IPR) - N/A
e. INTERNATIONAL TREATIES/ FORA - N/A
f. RELATED ISSUES – N/A

PART F: MARKETING

a. PUBLIC/ PRIVATE OPINIONS

No information

a. MARKET ACCEPTANCE/ STUDIES

No information

References

- African Centre for Biosafety – http://www.biosafetyafrica.net
- African Union - New partnership for Africa's development (AU-NEPAD) http://www.africa-union.org/root/au/AUC/SpecialPrograms/nepad/nepad.htm http://www.nepad.org
- Convention on Biological Diversity – http://www.cbd.int/biosafety
- Interstate Committee for Reducing Desertification in the Sahel (Comité permanent Inter-Etats de Lutte contre la Sécheresse dans le Sahel) - http://www.cilss.bf
- African Intellectual Property Organization (OAPI) http://www.oapi.wipo.net
- West and Central African Council for Agricultural Research and Development CORAF/WECARD - http://www.coraf.org
- West African Economic and Monetary Union (WAEMU) - http://www.uemoa.int

Acronyms

ABNE	African Biosafety Network of Expertise
GE	Genetically Engineered
INERA	Institut de l'Environnement et de Recherches Agricoles
NBA	National Biosafety Authority
NBC	National Biosafety Committee
UEMOA/WAEMU	West African Economic and Monetary Union