CHAPTER 23:
BIOSAFETY LAW AND POLICY IN CAMEROON

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1 Introduction

Cameroon is a Party to the Convention on Biological Diversity (CBD) concluded at the Earth Summit of Rio de Janeiro in June 1992. Since then, Cameroon has indicated its willingness to conform to the prescriptions of this Convention at the international level as well as making much effort to implement it at the national level. Over the last decade, Cameroon has invested great efforts to preserve its rich biological heritage. The value of biodiversity as a raw material for pharmaceutical and biotechnology industries is only a portion of its value to society. It makes good economic sense, and often meets ethical norms, for countries and communities to conserve biodiversity whether or not they become biodiversity prospectors.[1] Diversity means life; diversity means choice. Unfortunately, around the world, the space for the maintenance and creation of (new) diversity are becoming more and more confined. Biological diversity, in environments increasingly disturbed by human intervention is under threat. Globalisation forces are imposing limits on the ways people shape and reshape socio economic, cultural, and political diversity.[2]

At the national level, Cameroon has passed some laws as a measure to integrate several international environment-related Conventions into its national policies and laws. For instance, in 1994, the Law to lay down Forestry, Wildlife and Fisheries Regulations was enacted. The Forest Policy and the National Environmental Management Plan closely followed this. In 1996, the Framework Law relating to Environmental Management was enacted. Cameroon also adopted the National Biodiversity Strategy and Action Plan (NBSAP II). The validation of NBSAP II demonstrates the recognition of Cameroon's rich biodiversity as an invaluable natural asset for the wellbeing and development of its people, and the need to safeguard this asset.[3]

Biotechnology and more specifically biotech crops have been projected (by its promoters) not only as one of the tools for biodiversity conservation, but also tool to

1 World Resources Institute (1993).
2 Vernooy (2003).
3 Republic of Cameroon (2012).

increase crop productivity and reducing the environmental foot prints of agriculture. In fact, they uphold that it can also help in mitigating some of the challenges associated with climate change (increased severity of droughts, floods, changes in temperature, rising sea levels exacerbating salinity and changes in temperature) and reducing greenhouse gases by using biotech applications for 'speeding the breeding' in crop improvement programs to develop well adapted germplasm for changing climatic conditions and optimise the sequestration of CO_2.[4] In spite of all these promises, if biotech in left uncontrolled, it can pose great danger to human health and the environment. It is for this reason the international community negotiated a protocol to the Convention on Biological Diversity specifically to address risks associated to biotechnology called the Cartagena Protocol. The Cartagena Protocol on Biosafety is one of the most important international treaties of recent times. It marks the commitment of the international community to ensure the safe transfer, handling and use of living modified organisms. It is an historic commitment as it is the first binding international agreement dealing with biosafety, thereby addressing novel and controversial issues.[5]

Cameroon also took active part in negotiating the Cartagena Protocol on the prevention of biotechnological risks. Law No. 2003/006 of April 2003 to lay down Safety Regulations Governing Modern Biotechnology in Cameroon (the 'Biosafety Law') came along to crown the efforts of the Government to implement international Conventions at national level. This law broke new grounds in Cameroon as far as biosafety is concerned. However, the law relegated several aspects of its application to enabling instruments, which are the preserves of the President of the Republic, in keeping with the provisions of the Constitution. These aspects are covered by Decree No. 2007/0737 of 31 May 2007 on modalities on implementing the Law and Decree No. 039/CAB/PM of 30 January organising the National Biosafety Committee of Cameroon.

2 The scope and objectives of the 2003 Biosafety Law

The 2003 Biosafety Law covers the following areas: the safety, development, use including contained use, manipulation and crossborder movement, including the transit of genetically modified organisms that may negatively affect human and animal health, biodiversity and the environment. It also governs the safeguarding of products thereof that may negatively affect human and animal health, biodiversity and the environment. This, notwithstanding, the Biosafety Law does not apply to organisms

4 Clive (2009).
5 Mackenzie et al. (2003).

whose genetic material has been modified using traditional reproduction and coupling methods to develop and nurture plants and animals in natural conditions.

3 Basic environmental law principles within the biosafety legal framework

An interpretation of the Biosafety Law leads us to determine that it is directly or implicitly based largely on some key international environmental law principles.

3.1 The precautionary principle[6]

In the section of definitions, the Biosafety Law provides that "in case of suspicion of serious threat, or of irreversible damage, the absence of scientific proofs should not be a pretext to delay the taking of preventive measures". In Section 3 (1) it states that the services in charge of biosafety may prohibit any activity involving genetically modified organisms on the basis of the precautionary principle or new scientific knowledge.

3.2 The prevention principle[7]

The prevention principle is implied in Sections 10 and 11 of the Biosafety Law as follows:

Section 10: Users shall be responsible for ensuring that appropriate measures have been taken to prevent any negative impact on the environment that may result from the use and handling of genetically modified organisms.

Section 11 (1) goes on by stating that liability for any damage resulting from the release of genetically modified organisms shall be borne by the implicated user. Arguably, it can also be stated that the polluter pays principle is implied in these sections.

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6 The 1998 Wingspread Statement on the Precautionary Principle summarises the principlethis way: "When an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically."

7 The prevention principle: Although much environmental legislation is drafted in response to catastrophes, preventing environmental harm is cheaper, easier, and less environmentally dangerous than reacting to environmental harm that already has taken place.

4 Institutional framework

4.1 The National Competent Administration (NCA)

In keeping with the Cartagena Protocol on Biosafety and in accordance with the Cameroon Biosafety Law, the National Competent Administration (NCA) is the Ministry of in charge of environment, which takes its decision in this field, on the advice of a National Biosafety Committee made up of the services and bodies concerned (Section 5 (2) of the Biosafety Law). The other key administrations involved are the Ministries of Agriculture; Livestock, Fisheries and Animal Industries; Health; Technical and Scientific Research; Industrial and Commercial Development; and five other support Ministries. Other private sector representatives including civil society stakeholders are also included in the Committee.

4.2 The National Biosafety Committee

The National Biosafety Committee was created by Prime Ministerial Order No. 039/CAB/PM of 30 January 2012. Placed under the Minister of Environment, Protection of Nature and Sustainable Development, which is the competent national authority, this Committee is a consultative body charged with opining on questions related to prevention of risks emanating from modern biotechnology in Cameroon.

4.2.1 The composition of the National Biosafety Committee

The Committee is chaired by the Minister of Environment, Protection of Nature and Sustainable Development and is composed of members representing the other administrations in charge of agriculture, forestry and wildlife, scientific research, public health, higher education, commerce, fisheries and animal industry, technology development, Cartagena Protocol, agricultural research and medicinal plant research. Representatives from associations in the area of consumer's rights and that of biotechnology. While those of the administrations are designated by their various institutional heads, the two from the associations are designated by the ministers of commerce and of environment respectively. This, however, poses a problem of representation because it is very likely that those organisations will pay allegiance to the ministers that appointed them than to the civil society.[8] The Minister also has the right to

8 The ideal situation would have been for the civil society to have a self-selection process using their own criteria. This would guarantee the independence and true representation of the non-

invite competent physical or moral persons to sit in the committee depending on the need at hand. This composition is effected through a decision of the minister in charge of the environment. The Committee is assisted by a Technical Secretariat, that handles issues related to meeting agenda, preparation of files for examination, follow up of Committee resolutions, invitations of committee members and archives.

4.2.2 The powers and duties of the National Biosafety Committee

As a consultative body is charged with opining on questions related to prevention of risks emanating from modern biotechnology in Cameroon, the National Biosafety Committee, among other things, is charged with the following:

- to ensure compliance with and implementation of international conventions duly ratified by Cameroon on biosafety;
- to prepare and disseminate information on the prevention of risks related to genetically modified organisms (GMOs), living modified organisms (LMOs) and their derived products;
- to promote and facilitate public awareness, education and participation in the security of movement, handling and use of GMOs, LMOs or derived products;
- to elaborate, adopt, simulate practical exercises and implement emergency response strategies in the event of the accidental release of GMOs, LMOs or products into the environment;
- to define the packaging, labeling and marketing standards to be respected by the producer and the consignor of the products based on GMOs, LMOs and their derivatives put into circulation on the national territory;
- to define general safety measures such as good laboratory practices, good industrial practices and their good production practices to be followed by the user of GMOs, LMOs and their by-products and revise them every two years;
- to define the measures to be taken in order to transport GMOs, LMOs or derived products within the national territory;
- to request requests for prior informed consent for the import or export of genetically modified organisms;
- to instruct applications for the testing and use of GMOs, LMOs or by-products in an open environment;

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state-actors position on opining freely on the issues such as applications and risk assessment reports.

- to investigate requests for experimentation and use of GMOs, LMOs or by-products in confined areas;
- to prepare and submit to the Competent National Authority the report on the assessment of the risks likely to be caused by GMOs, LMOs or derived products on human, animal and plant health and on the protection of biodiversity and taking into account the precautionary principle, the opinions of experts and the guidelines developed by the appropriate international organisations;
- to issue a notice to the Competent National Authority on management methods and their safety measures for tests in confined or open environments;
- to issue a notice to the Competent National Authority on the risk assessment reports;
- to issue a notice of approval, approval subject to, rejection or revocation of an agreement, in relation to the various applications submitted to the Competent National Authority in the field of biosafety;
- to design and certify experts and laboratories or reference centers for quality verification tests, review of requests for environmental risk assessment from institutions or groups of experts;
- to participate in post-control to halt or minimise latent risks, even after approval of environmental dissemination;
- to issue an opinion on the nature and rate of compensation or compensation for damage caused or resulting from the use of GMOs or LMOs prohibited or introduced in violation of the laws and regulations in force; and
- to propose to the Competent National Authority any relevant measures, including the withdrawal of approval or authorization, destruction of GMOs or LMOs, with a view to preventing or managing all risks posed by organisations or their products.

5 Procedure for submitting applications

According to Article 45 of the Prime Ministerial Decree No. 2007/0737/PM of 31 May 2007, any natural or corporate body wishing to carry out any activity in research, development, production manipulation and marketing of GMOs or products thereof in contained conditions or intended to be released must obtain authorisation from the competent national administration (minister in charge of the environment) with the recommendation of the National Biosafety Committee. Article 45 sets the basic requirements which also include a treasury receipt of payment of application fee. The National Biosafety Committee helps the competent national administration in studying the application and their opinion is based on information which range from:

- a stamped application bearing the applicant's full name, nationality, profession, place of residence and full address;
- name of person(s) responsible for planning and carrying out the activity, including those responsible for supervision, monitoring and safety, in particular, name and qualification(s) of the responsible scientist(s);
- brief description of the proposed project objective of the project, what is the aim of the proposed project, of what benefits is the proposed project to Cameroon and to the applicant;
- information relating to the GMOs or products thereof;
- information relating to conditions of release, contained use or placing on the market;
- information on monitoring, control, waste treatment and emergency response plans; in case of an application for contained use, an impact assessment setting out the consequences of unintentional release of the genetically modified organisms or product thereof;
- an engagement to do public consultation, proven by a copy of a press release informing the public of the GMOs project or general release of GMOs;
- information on the geographical site chosen for the project; and risk level (1-4); and
- any other information as may be required by the competent national administration.[9]

5.1 Importation, confined trial, release, placing in the market, transit and or transportation of GMOs

According to the Biosafety Law, for biotechnological products to be imported or exported, the competent national administration in charge of biosafety in the exporting country concerned shall issue, to whom it may concern, information attesting the safety of the products concerned. GMOs developed within the national territory and designed for export shall be subject to the same procedure. As for transportation of

9 This any other information that could be requested for to help the authority make an informed decision is generally wide depending on the file at hand. This could include, but is not limited to: a) A report on the impacts and risks posed by the genetically modified organism(s) or product thereof to human and animal health, biological diversity and the environment in accordance the manual of risk assessment in force; b) Information as to whether this project on genetically modified organisms has been carried out in the country of origin before; c) What were the consequences, both adverse and beneficial as well personal information of the personal conduct of the promoter proven by a certificate of non-conviction.

GMOs on the national territory, all users shall, in accordance with the provisions governing the transportation of transgenic animals, take sufficient measures:

- to prevent the escape of animals, given such possibilities as accidents on the way so that they are not crossed with domesticated indigenous populations;
- to be sure that they are well identified and that they reach their destination as intended;
- to ensure that the process is supervised by a competent biologist with experience in the management of stockbreeding-related problems; and
- to institute accounting procedures that will ensure that the number of animals shipped remain same at delivery.

Again, only cages and containers approved by the competent national administration may be used for transportation. For this reason, exporters and importers are obliged to contact the competent national administration for directives related to the purchase of cages approved by airline companies for the transport of specific non-pathogenic animals. During the transportation of transgenic insects and their pathogenic agents, the following measures must be taken:

- the insects must be put in an unbreakable locking container clearly labelled and hermetically sealed in order to avoid leakages;
- the locking container must be put in another container clearly labelled and properly sealed for transportation;
- the insects must be transferred from the container to another container immediately they arrive at their destination;
- all the transport equipment must be decontaminated by autoclave after the transported insects are transferred into new containers; and
- accounting procedures must be set up to ensure that the number of containers and insects exported are the same upon delivery.

Any transgenic material to be transported within and between institutions, must first be put in a primary container, such as polythene bags for seeds and placed in unbreakable secondary containers. The outer container must also be labelled to show that it contains transgenic material. The label bears the address of the sender to be contacted in case of loss or damage of the parcel. The labels on the parcels of seeds shall indicate the quantity transported. Complete transgenic plants must be covered with nets and devoid of flowers before they are transported. They may be transported in pots, placed in boxes or racks. The plants shall not be transported when they start bearing seeds. As for transportation of micro-organisms, these must be done in accordance with international norms in force and shall not, for any reason, be transported in personal luggage by public or private transport.

Cameroon acts like a transit hub for her land locked neighbours such as Chad and the Central African Republic. For that reason the Biosafety Law is very stringent on transit of GMOs. It states that any person or company transporting genetically modi-

fied organisms through the national territory in transit to other countries shall inform the competent national administration far in advance, and comply with the national requirements relating to containment and transport, as laid down in this law. The competent national administration must grant the prior approval with full knowledge of the facts before the transit is effected. Moreover, the following safety measures must be respected:

- every importer/exporter of GMOs transiting through the national territory, shall ensure that the imported/exported GMOs have been inspected, at own expense, by the competent services;
- all GMOs transiting through the national territory shall be granted a period of 60 days during which they shall be escorted out of the country. This period shall be indicated on the documents accompanying the escorted containers, and certified by the competent national administration in collaboration with the other authorities involved at the exit or entry ports.

Detailed transit conditions and procedures are laid down by the Prime Ministerial Decree No. 2007/0737/PM of 31 May 2007.[10]

5.2 Packaging and labelling of GMO for food

The Biosafety Law states that any GMOs or products thereof intended for intentional release or marketing on the national territory shall be packaged and labelled in order to safeguard ethical and cultural values, and to avoid risks to human and animal health. All the GMOs perfected and marketed on the national territory must be packaged and labelled by the producer and sender as follows: "Product based on genetically modified organisms", or "contains genetically modified organisms", in compliance with other supplementary norms defined by the competent national administration in collaboration with the other authorities involved. For that reason the following information has to be specified:

- distinctive marks of the model or specifications of packaging, irrespective of the container, generally used by the manufacturer of packages;
- packaging with marks indicating content, donor and consignor; and
- labels with specific colours corresponding to dangerous contents.

Moreover, the consignor is obliged to fill in and sign two copies of a manifest. The said manifest attest to the respect, by the sender, of the requirements of the advance

10 Articles 69 to 74 of this decree give details as to timelines, costume declarations, conditions of escort of the consignment, and conditions of refusal of authorisation to transit GMOs through the national territory.

informed agreement. The distributor of genetically modified organisms has to regularly register his commercial activities in accordance with the regulations in force. All importers and commercial agents involved in the distribution of genetically modified organisms and products thereof must pay expenses whose amounts are to be fixed annually by the Finance Law.

5.3 Approval and authorisation

Any activity in the research, development, production, manipulation and marketing of GMOs or products thereof in contained conditions, or intended to be released shall be subject to approval by the competent national administration in collaboration with the other services concerned. The procedure for applying for authorisation are spelled out by the Prime Ministerial Decree No. 2007/0737/PM of 31 May 2007.[11] All applications for approval for activities in the research, development, production, manipulation, use and movement of GMOs and products thereof shall be subject to payment of charges the amounts of which are determined by the finance law.

5.4 Approval of rDNA pharma products

Recombinant-DNA (rDNA) vaccines and other pharmaceutical products manufactured through genetic modification and marketed on the national territory shall be subjected to the same safety norms provided for in the Law. Recombinant-DNA products and other imported pharmaceutical products must be quarantined at entry ports until samples which shall be tested by the competent national administration shall prove that the said products are not dangerous, before they are placed on the market. In the absence of any proof of danger, the competent national administration has to, in collaboration with the other services involved, take the responsibility to authorise the release of the products. Consequently, the manufacturer is obliged to set up strategies and to ensure the follow-up of the products, in order to fully guarantee their safety to human and animal health as well as to the environment. The method of work in the field of rDNA vaccines and other pharmaceutical products manufactured through genetic modification determined by Articles 26 to 35 of the Prime Ministerial Decree No. 2007/0737/PM of 31 May 2007.[12] With regard to GMOs perfected on

11 The details are spelled out by Articles 7 to 13 of the Decree.

12 A permit authorisation must be obtained for manufacturing, importation, distribution and marketing of rDNA vaccines and other pharmaceuticals from the national competent administration in collaboration with the NBC. Chemical trials protocol and procedure must be submitted to the Competent National Authority and the Drug Regulatory Authority (Ministry of Health)

the basis of genetic resources taken from the national heritage, the provisions of the regulations in force relating to access to genetic resources and sharing of benefits have to be applied mutatis mutandis. However, products based on GMOs intended for human or animal consumption are subject to specific norms determined by special instruments.

5.5 Conditions to ban activities related to GMOs

Any approval given to a user may be revoked on the basis of the precautionary principle, or subject to conditions in addition to those originally imposed, if in the opinion of the National Biosafety Committee:

- new or additional information has been made available since the date of the consent and such new and additional information affects the environmental risk assessment in respect of the GMO or the product thereof;
- a reassessment of existing information in respect of the GMO or product thereof on the basis of new or additional scientific information proves it is most likely to cause damage to the environment, human health and biological diversity if such an activity was allowed to be executed.

In the circumstances the National Competent Administration has to:

- serve a prohibition notice on the user to prohibit any approved or authorised activity involving GMOs or its products thereof previously granted to the user, requiring such measures to be taken, as it may consider appropriate;
- order the cessation of any activity so that measures may be taken to prevent or limit harm;
- the prohibition notice must be served on the user with proof of acknowledgement of receipt;
- once any work required by the notice has been carried out it enters details of it on the register;
- order the seizure and destruction of the prohibited GMOs. The procedure for such seizures and destruction must be done in accordance with the regulations in force;

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for control and approval before commencement of the trial of pharmaceuticals of genetically modified organism origin. Samples to be used in such trials should have been sent to the National Quality Control Laboratory for control. The manufacturer, importer or distributor must monitor all rDNA vaccines and other pharmaceuticals and report all adverse reactions of these products to the ministry in charge of public health.The first marketing authorisation will be issued for a period of 18 months after which the authorisation will be renewed for a period of five years. The competent national administration may in certain circumstances waive some of these requirements, considering the therapeutic interest of such drugs in the society.

- order for repairs or compensation for any damages caused or arising as a result of the use of the genetically modified organisms now under prohibition following the modalities provided for in the regulations in force.

In cases where an activity has been prohibited as stated above, the NCA shall immediately inform the user of such prohibition, and must at the same time provide the public with the following information:

- its reason for taking such actions;
- the results of its review of the environmental risk assessment;
- its opinion as to whether the conditions of the consent should be varied, and if so, how or whether the consent should be revoked; and
- where appropriate, the new and additional information on which its decision to take action was based.

5.6 Request to revise the decision to ban activities related to GMOs

Any user or aggrieved party who intends to continue with the import, export, release, use in contained conditions or place in the market, GMOs or products thereof after the prohibition decision, may, at any time within a period of three months beginning from the date of receipt of the decision, appeal to the NCA for the said prohibition decision to be reviewed. Without prejudice to the requirements for applications for approvals provided by the law and regulations in force, the appeal shall include an update of all information required for applications for approvals of the prohibited GMOs or products thereof, in compliance with the specifications provided for by the law to lay down safety regulations governing biosafety and modern biotechnology in Cameroon, and any other information as may be required by the NCA. The appeal shall in no circumstance act as a stay of the execution of the repairs or damages ordered in case there were damages caused. The NCA has the duty to publish the appeal and as for fresh public consultations before taking a decision on the appeal.

5.7 Socio economic considerations

According to Section 32 of the Biosafety Law, prior to any deliberate release of GMOs into the environment, a thorough study of their ethical and socio-economic impact on the local population must be conducted by the competent authority in collaboration with the government services concerned. Such a study shall include the effects on:

- the traditional market and export earnings;
- health;

- production systems;
- ethical, moral and social considerations; and
- the actual economic value of traditional species likely to be affected by the introduction of the GMOs.

It goes further to saying that funding of the study shall be provided by the user. Moreover, the Biosafety Law insists that appropriate emergency response strategies must be applied in the event of accidental release and in order to reduce its socio-economic impact by the competent national administration in collaboration with the other services concerned.

5.8 Transparency, public participation and awareness and right to information

According to Section 35 of the Biosafety Law, the NCA shall, in collaboration with the other services concerned, foster and facilitate the sensitisation, education and participation of the public with regard to the safe movement, manipulation, and use of GMOs concerned in relation to the conservation and sustainable management of biodiversity, taking into consideration the risks on human health. It shall require that any person involved in modern biotechnology should sensitise and educate the public on the risks and benefits that such organisms entails. This could also be done through public hearing which has been defined by the law as meeting with the local or neighbouring population through which they can react, after having been duly informed of any activity on the environment which, according to them, could adversely affect human or animal health or the environment. According to Articles 46 and 47 of the Prime Ministerial Decree No. 2007/0737/PM of 31 May 2007, the NCA must prove that it took into consideration the opinions and concerns of the public before taking its decision.

5.9 Confidentiality and commercial information

During the appeal proceedings, the NCA shall protect information, which it determines as being confidential after a claim for confidentiality is made by the appellant. In no case may the following information supplied by the appellant be kept confidential:

- description of the GMOs or products thereof, names and addresses of the appellant, purpose and location of the import, deliberate release (including the location and scale of the release), contained use or placing on the market of the GMOs or products thereof;

- methods and plans for monitoring of the GMOs or products thereof and for emergency response;
- the evaluation of foreseeable effects, in particular any pathogenic and/or ecologically disruptive effects; and
- the fact that the GMOs or products thereof have been banned or subject to stringent conditions.

The NCA may make available the information, referred to above to the public pursuant to provisions of the law on public participation and public hearing, notwithstanding that the information may be commercially confidential, if it decides that it is in the public interest to do so. Without prejudice to the provisions of the law on confidentiality, if the appellant withdraws the appeal before the appeal decision, the competent NCA must respect the confidentiality of the information determined as being confidential. Any appellant carrying out any activity under this decree shall supply information necessary for the competent authority to carry out its supervisory, monitoring or enforcement tasks or to deal with any emergency measures in relation to the activity and there shall be no claim of confidentiality in relation to such information. Any person aggrieved by any decision of the NCA may, at any time within the period of three months beginning from the date of receipt of the decision, appeal to such adjudicatory authority as may be set up by law. In this case, 'decision' includes any act, omission, refusal, direction, imposition of condition(s) or order.

6 GMO related liability general environmental liability

According to the Biosafety Law, all users shall be responsible for ensuring that appropriate measures have been taken to prevent any negative impact on the environment that may result from the use and handling of genetically modified organisms. GMO related liability can be the following circumstances: (1) Liability for any damage resulting from the release of GMOs shall be borne by the implicated user. (2) When an inspector or controller seizes such an organism as stipulated in Section 56 of this law, the user concerned at the time of use or of the release thereof shall not be liable for any damage caused, except where the latter had anticipated or was in a position to foresee and prevent the said damage, and had however failed to take acceptable action to that effect.

7 Offences, penalties and settlements

According to the Biosafety Law, offences include but are not limited to:

- refusal to provide information or any explanation to an inspector or controller in the discharge of their duties; and
- posing as a sworn inspector or controller.

The Biosafety Law further states that without prejudice to the prerogatives granted to the prosecution and judicial police officers of general competence, sworn inspectors and controllers of the competent national administration in charge of biosafety or other services concerned shall be responsible for the investigation, establishment and repression of offences against the provisions of this law. The officers referred to above shall be sworn in before competent courts at the request of the authority concerned, in accordance with the conditions laid down by regulation. In the discharge of their duties, sworn officers must put on professional identity cards. Any offence that is established must be subject to a regular report. Investigation and establishment of offences is carried out by two officers who shall co-sign the report. The report shall be valid until the contrary is proven. Any report on the establishment of an offence must be transmitted immediately to the competent national administration in charge of biosafety who shall notify the accused. The accused shall, within a period of 20 days, with effect from the date of notification, be free to contest the report. Beyond the above mentioned period, no protest shall be accepted. In case of protest within the time-limit indicted above, the claim shall be examined by the competent national administration in charge of biosafety.

Where the accused's claim is right, the matter shall be closed. Where the claim is unfounded and no settlement is carried out, the competent national administration in charge of biosafety shall, in conjunction with the authority in charge of classified establishments, take the matter to court in accordance with the regulations in force.

Penalties either in the form of imprisonment and/or fines. Specifically the following sections of the Biosafety Law spell out the penalties:

- Section 60: Whoever is found guilty of violating the safety measures provided for in sections 7, 9, 13, 14, 20, 22 and 55 of this law, shall be punished with imprisonment for from six months to two years or with a fine from 100,000 to 1,000,000 FCFA or with both such imprisonment and fine;
- Section 61: Whoever violates the approval, authorisation, notification and urgent intervention measures provided for in sections 25, 26, 28, 30 and 36 shall be punished with imprisonment for from two to five years or with a fine of from 1,000,000 to 5,000,000 FCFA or with both such imprisonment and fine;
- Section 62: Whoever is found guilty of putting GMOs and products thereof into dangerous use shall be punished with imprisonment for from five to sev-

en years or with a fine of from 5,000,000 to 10,000,000 FCFA or with both such imprisonment and fine;
- Section 63: Whoever is found guilty of an offence committed in relation to a micro-organism shall be punished with imprisonment for from seven to ten years or with a fine of from 10,000,000 to 100,000,000 FCFA or with both such imprisonment and fine;
- Section 64: any second offender, shall be liable to twice the maximum of the penalties provided for above.

The Biosafety Law permits settlements. According to Section 65, the competent national administration in charge of biosafety shall have full powers to work out a compromise. To this end, the accused must refer the matter to the authority concerned. The amount of money paid as settlement shall be determined in consultation with the authority in charge of finance. The said amount shall not be less than the minimum amount of the corresponding penal fine. It further states that under pain of nullity, the settlement procedure shall be carried out before any possible court proceeding. The method of collecting and allocating the proceeds of the settlement shall be determined by regulation.

8 Concluding remarks

Cameroon is one of the most important countries in Africa in terms of the biodiversity of its forests. The rich biological diversity of the lowland forests is attributable to their very stable existence even during periods of cool, dry weather such as occurred in the Pleistocene during which rain forests were considerably reduced elsewhere. High endemism occurs in the montane forests, which were isolated from one another during these same periods. The different forest types are subject to different pressures as Cameroon heavily depends on its biodiversity for its development. Way beyond the economic value of Cameroon's biodiversity, the cultural value attached to biodiversity by the communities is immeasurable. In the current climate constrained context, the country's biodiversity is a sine qua non for the survival of the population. Indeed, it will be in the interest of Cameroon, and this is entirely possible, to invest in biodiversity conservation without ever seeking to commercialise its genetic and biochemical resources. Having adopted the Cartegena Protocol followed by its domestication with national laws and other regulations, there is need for enforcement. This can only be realised if the judiciary is well engaged, especially as environmental laws are still finding their way to the front desk of judicial decisions in Cameroon. It is held that some importation of genetically modified maize took place under conditions that did fully the applied the provisions of the laws and regulations on biosafety in force. It is true that the promotion of sustainable development through

legal means at national and international levels has led to recognition of judicial efforts to develop and consolidate environmental law. The intervention of the judiciary is necessary to the development of environmental law, particularly the implementation and enforcement of laws and regulations dealing with environmental conservation and management. This is what Cameroon urgently needs, for the problem of Cameroon is not the lack of legal instruments, but mostly the non-implementation and non-enforcement of existing ones. This leaves the environment and its population in a challenging situation, because, in normal circumstances, when all else fails, the victims of environmental tort turn to the judiciary for redress. However, as of today, environmental problems are still a challenge to Cameroonian legislators and the judiciary alike by their very novelty, urgency, dispersed effect and technical characteristics.

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