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The role of media in promoting
biosafety awareness

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Introduction

by Braulio Ferreira de Souza Dias ●
Executive Secretary of the Convention on Biological Diversity

Welcome to the tenth issue of the *Biosafety Protocol News* – a bi-annual newsletter published by the CBD Secretariat to facilitate the exchange of information and news regarding the implementation of the Cartagena Protocol on Biosafety. This issue of the newsletter focuses on the role of media in communicating and raising awareness of biosafety issues and highlights the experiences and lessons learned in this regard.

Over the last decade, a number of Governments and other stakeholders have engaged media to promote public awareness of biosafety issues. In this issue, authors from three Governments (Belarus, China and Liberia) share their experiences and lessons learned in undertaking media-related activities and in using various communication tools to inform and educate the public about biosafety issues. Two other authors, one from a Science and Development Network and another from a national newspaper, also share their experiences in reporting on biosafety issues, including the challenges faced.

The article from Belarus highlights the media-related activities undertaken by the Government of Belarus to provide its citizens with information concerning living modified organisms (LMOs) and the national biosafety system. These have included organization of press conferences and interviews with the national newspapers, local radio stations and with national and international television channels. The article from China provides an overview of current media coverage of biosafety in China and highlights examples of activities undertaken to promote public awareness and media participation and reporting on biosafety. The activities included an International Biosafety Forum, an LMO education campaign, exhibitions on LMOs and agricultural biosafety, interactive online public discussions and a Journalist Training Workshop on LMOs. The article from Liberia highlights the importance of proactive media engagement, including through development of a media strategy and preparation of press materials, and the experience with participation of the media in the national biosafety framework process.



The article by the author from the Science and Development Network (*SciDev.Net*), a not-for-profit organisation publishing articles on LMOs and other science and technology issues, describes the challenges involved in reporting on biosafety, a topic on which the debate is often polarized, and the strategies used by *SciDev.Net* to overcome those challenges. The author from a Nigerian newspaper, the *Leadership*, emphasises the importance of using local and national biosafety experts to continuously provide print media with relevant biosafety information. The key message in both articles is that access to reliable information is absolutely critical.

As noted in the articles, public awareness, education and participation are imperative for the effective implementation of the Protocol. It is only when citizens are able to access and understand information regarding LMOs that they will make informed choices, take appropriate action and effectively participate in the decision-making processes regarding LMOs. The media serves as an important bridge between the public and the scientists and/or regulators. Therefore it is important for the scientists, policy makers and regulators to actively engage the media in biosafety activities. It is also crucial for the media to enhance the quality, depth and accuracy of information in their news articles and to expand the range of their reporting activities in order to contribute to broader public awareness of biosafety issues and to the effective implementation of the Protocol.

I would like to thank all the authors of the articles in this issue for sharing their invaluable information and experience. This is undoubtedly a very important contribution to our mutual quest to improve media reporting on biosafety. I wish you a good reading.

Engaging and empowering the media to promote biosafety awareness: China's experience

by the Ministry of Environment Protection

In China, the media plays an important role in publicizing basic information, domestic and foreign research and development (R&D) profiles, and information on the level of biosafety management as a means to raise public awareness and promote public participation of biosafety issues.

Overview of current media coverage

In 1999, a component on a public participation mechanism was specifically included in the National Biosafety Framework for China. Since then, competent national authorities (CNAs) to the Protocol have worked with media to highlight progress and information on GMOs and biosafety. They have done so through, among other things, online news releases, press conferences, publicity materials, popular science papers and seminars to enhance public awareness and participation. Over the past five years, policies concerning public access to environmental information and the encouragement of media participation are being incorporated into several important documents that cover multiple sectors, including environmental protection.

Environment Policy for Information Disclosure

In early 2007, during the 11th Five-Year-Plan period, a Platform for Action called the National Environmental Publicity and Education was jointly established by the State Environmental Protection Administration (SEPA) of the Publicity Department of the Communist Party of China Central Committee and the Ministry of Education (MOE). It requires that measures be taken to increase available information, ensure public access to, and monitoring of, environmental issues, and develop a public participation mechanism. In May 2008, the regulations on the Disclosure of Government Information came into force. Established by the State Council and Measures on Disclosure of Environmental Information, under the Ministry of Environmental Protection, the regulation provides a policy basis for information disclosure and public participation in biosafety issues.

Promoting media participation

Over the years, several activities have taken place to promote the public participation relating to media.

In September 2008, at the third meeting of the International Biosafety Forum, journalists were invited to discuss and exchange ideas. In April 2011, at its fourth meeting, representatives of the general public, such as journalists, supporters of science and technology and ordinary citizens, were, for the first time, invited to discuss popular science and public participation in biosafety issues.

In November 2009, a thematic education campaign titled "Genetically Modified Technology in Our Daily Life" was co-organized by the Chinese Academy of Agricultural Sciences, the Chinese Society of Biological Engineering and the Science and Technology Museum of China. Hundreds of people participated in this event.

In June 2010, the Agriculture Bureau of Beijing held an exhibition on popular sciences of agricultural biosafety under the theme: "Coming closer to GMOs".

In September 2010, on the National Day of Popular Science, the Center of Science and Technology Development, which is part of the Ministry of Agriculture, organized an exhibition on genetically modified technology and products thereof based on the project: Key Thematic Project of Nurturing New Genetic Modified Organisms.

In August 2011, the Journalist Training Workshop on GMOs was held in Beijing, featuring lectures on GMOs and biosafety for journalists and editors from more than 50 media agencies.

In addition, each year the Ministry of Environmental Protection organizes various public events using the theme of the International Day for Biological Diversity. In doing so, they develop newspapers columns and newsletters on biosafety issues to draw the public's attention to GMOs and biosafety issues.



⋮ In China, the newspaper *the People's Daily Online* often organizes ⋮ interactive online activities on biosafety

Furthermore, the newspaper the *People's Daily Online* often organizes interactive online activities on biosafety. Other media outlets also publish reviews and exchange ideas with readers through interactive tools, such as the *People's Daily*, the *Guangming Daily* and the *Science and Technology Daily*.

Challenges

With the rapid development of genetic engineering and related sectors, people pay much more attention to the risks to food and to the safety of the environment. Although media has played an active role in disseminating biosafety information in recent years, huge challenges remain in promoting public awareness and participation. First, the lack of availability of in-depth reports on the scientific nature of biosafety issues leads to limited publicity and education. Second, media coverage of biosafety activities is inadequate. The news stories do not reach small and medium-size cities and rural areas. Third, financial support is insufficient and restricts media in carrying out further publicity and educational activities.

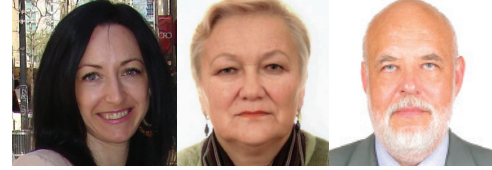
Conclusion

Public awareness, education and participation are key factors for the effective implementation of the Cartagena Protocol on Biosafety. Only when the public is able to access information and understand GMOs will they make informed choices, take action, and participate in the decision-making process. Meanwhile, public participation is essential to improve transparency, understanding and the strengthening of public support for decision making. Therefore, the CNAs to the Protocol should play a leading and coordinating role by organizing relevant departments and agencies to promote disclosure of information and protect the public's rights to access information and make choices. At the same time, serving as a bridge, media should strengthen the depth of information in their articles and expand the range of activities to contribute to broad public participation in biosafety and environmental issues.¹

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Engaging and empowering the media to promote biosafety awareness: The experience in Belarus



by Natalya Minchenko, Elena Makeyeva and Sergey Dromashko ●

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The genetic engineering activity is regulated by the “On Safety in Genetic Engineering Activities” (No.96-3), a law established 6 January, 2006. It has a provision supporting Article 23 under the Protocol: “The Right of Citizens and Public Associations of Access to Information in the Safety Field of Genetic Engineering Activities”. The public can access important information regarding the use of modern biotechnology through the central and local television, radio and newspapers, scientific and educational journals, websites of the National Co-ordination Biosafety Centre and the Biosafety Clearing-House (BCH).

Lately, the issue of genetic engineering has become a frequent subject of discussion, both at the international and national level. Throughout the world, modern biotechnology is recognized as having the potential to improve human well-being. However, with the rapid advancement of modern technology, people are anxious about its potential negative effects on biological diversity and human health. Considering the circumstances and the fact that safety is one of the basic aspects of the Convention on Biological Diversity, an international mechanism was developed within the framework of the Convention, the Cartagena Protocol on Biosafety.

The Republic of Belarus aligned itself with the provisions of the Protocol by adopting a law on 6 May 2002 to join the Protocol. In addition, on 9 January 2006, the law “On Safety of Genetic Engineering Activities” was approved in Belarus to implement the provision of the Protocol.

Furthermore, the entry into force of the Protocol shows that Parties are mindful that living modified organisms (LMOs) differ from other organisms and varieties produced by traditional breeding techniques. The goal of the Protocol is to ensure that countries importing, exporting and using LMOs have the opportunity and the capability to, for example, assess the potential risks to the environment and human health posed by products of modern biotechnology.

The Protocol is a legal tool that has allowed Belarus, as a Party, to establish national regulations consistent with the Protocol and other obligations under international laws, to regulate genetic engineering activities and the transboundary movements of LMOs.

Moreover, the Belarus Council of Ministries defined the central role of the National Co-ordination Biosafety Center (NCBC) as having to be involved with the following:

- The collection, analysis and systematization of information on legislation and scientific review of biosafety issues;
- Field trials of the transgenic plants that are imported exported;
- Commercial use of GMOs and LMO products from Belarus; and
- Public awareness, education and participation concerning the safe transfer, handling and use of LMOs.

Since then, the main task of the NCBC was to provide citizens with scientific information about achievements in genetic engineering. A short description of activities during the last two and a half years is presented below to express NCBC’s aspiration to deliver as much information as possible concerning LMOs and the National Biosafety System as a tool to regulate LMO market-turnover and GMO use in the food industry. The two main activities were:

- Three press-conferences held at the National Press Centre in 2010 and during scientific events organized by the NCBC in 2011.
- From 2010 to 2011, NCBC personnel gave over 20 interviews. These were published in the main newspapers in Belarus (e.g. the *Soviet Belorussia–Belarus Today*, the *Republic*,



⋮ In Belarus, the National Co-ordination Biosafety Center developed a program to engage and empower the media to promote awareness of biosafety issues . The program involves holding seminars and public discussions on biosafety issues

and the *Minsk Courier*). Specialists with the NCBC were invited by local radio stations (e.g. Radius FM and Radio Belarus) and national and international television channels (e.g. NIS TV MIR, Belarus Channels Belarus-1 and ONT) to discuss issues related to LMOs and national regulatory mechanisms regarding genetic engineering. In addition, the Telegraph Agency BELTA published information that was disseminated via the Internet.

In Belarus, disseminating objective information on LMOs to school teachers and students is considered the main method of promoting education and knowledge on biosafety issues to citizens. From 2011 to 2012, two articles were published in a methodological journal about the scientific principles of LMO development and detection of genetically modified ingredients in foodstuffs and feed. The journal was targeted to teachers holding courses with the title: "Biology: Education Problems". Furthermore, from 2010 to 2012, NCBC personnel organized several lectures on LMOs and biosafety issues for university students and a lecture to students of secondary schools at the National Health and Education Center for Children "Zubryonok".

The preparation of the second national report for the Protocol allowed television and radio centers to conduct interviews with famous scientists and specialists studying GMOs and to broadcast these on local radio stations. The people of Belarus have also been asked to send their feedback, opinions and comments directly to NCBC or to its website .

The NCBC developed a program to engage and empower the media to promote awareness of biosafety issues . The program involves holding seminars and public discussions on biosafety issues, the use the NCBC and the BCH website and databases. However, these goals cannot be continued without the financial support from the Global Environment Facility.

⋮ The issue of public access to information and participation in decision making regarding living modified organisms (LMOs) is an important component of the national biosafety framework and is under development. The stakeholders of the Cartagena Protocol on Biosafety process in Belarus recognize the importance of the activities in that area.

Engaging and empowering the media to promote biosafety awareness: Liberia's experience



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Liberia is endowed with rich biological diversity. Its forests account for about 42 % of the remaining Upper Guinea Rainforest and is home to several endemic wild plants and animals as well as many land races of crops and animals. To ensure conservation of these biological resources, a number of strategies, including a National Biodiversity Strategy and Action Plan and a National Biosafety Framework (NBF), were prepared through extensive stakeholders' consultation and participation from 2002 to 2004. The role of media in the development of Liberia's NBF was very vital. This article highlights Liberia's national experience in engaging and empowering media to facilitate public awareness and participation in the processes of the development of the NBF.

Experiences and lessons learned

From 2002 to 2004, the United Nations Environment Programme-Global Environment Facility (UNEP-GEF) Project on development of the NBF in Liberia was indeed an opportunity to engage and work with media, because the whole concept of biosafety was quite new in the country and not fully understood by most Liberians. The need to adequately inform the public so they could participate in a meaningful manner in the preparation of the NBF, and thereafter take ownership of it, was quite crucial. The press was engaged in a number of ways to achieve this goal.

Media engagement

An important method to engage media was to provide them with background information on thematic issues for discussions at workshops prior to commencement of the meetings. This enabled the press to have a better insight into the workshops and enhance the quality of information disseminated to the public. In addition, radio talk shows on key biosafety issues were usually held during workshops to provide the wider public with an opportunity to voice their opinions on issues at hand.

Development of a media strategy

A media strategy for public awareness and participation was developed as a component of the NBF. In pursuance of this strategy, awareness programs were designed to key target groups and consultations were held with them. For example, awareness meetings on biosafety/biotechnology were held with school authorities and students on school campuses in various regions of the country. Local authorities and farmers were consulted in rural towns to provide inputs into preparation of the NBF. This level of inclusiveness gave ownership of the NBF to the people.

Development of press materials

In an effort to provide effective public awareness and empower media to promote the Cartagena Protocol on Biosafety, essential information materials were developed during the NBF development project. These included two brochures. The brochure *Biosafety and You* provided basic information on the Protocol on key provisions and processes for implementation at global and national levels. The brochure *Frequently Asked Questions* provided answers to key commonly asked questions in the Liberian context on biosafety and biotechnology. The brochures were printed and distributed to stakeholders, including policy/decision makers, the press, consumers' organizations, academia and other target audiences at meetings and workshops.

In addition to the brochures, the Biosafety Unit at the Environmental Protection Agency of Liberia published weekly articles in local dailies under the theme Biosafety Forum. The objective of this initiative was to reach a wider audience with information about biosafety/biotechnology and the Protocol in order to assist stakeholders to actively participate in formulating the NBF.

Furthermore, press materials in the form of press releases were produced during the NBF development project. The press releases were prepared in connection with workshops or celebrations of special events, such as the fifth anniversary of the entry into force of the Protocol. The messages were published in newspapers and also read on the radio – at times in local vernaculars in addition to English.

: A media strategy for public awareness and participation : was developed as a component of the National Biosafety : Framework

Main challenges

In Liberia, there were serious challenges that needed to be overcome in engaging and effectively promoting public awareness and the participation of media in development of the NBF. Owing to the prolonged civil war that devastated infrastructure in the country, the lack of stable electricity was a major challenge in preparation of press materials. Another critical issue is the language barrier. Most awareness workshops were held in rural areas and in English. However, most people do not understand English. In addition, the concept of biosafety is still not understood by most people because of the complex science involved. Inadequate financial resources to continue awareness-raising activities became a serious challenge since the country was emerging from war and hardly had funds to support basic services for the population.

Major achievements

One of the main achievements from engaging media is the increased level of media coverage on biosafety issues. This has enabled some members of press to better appreciate the Protocol. The press materials developed from the NBF development project is also a major gain as they are still being used to support current awareness campaigns. Another major achievement is the relative increase in awareness on biosafety.

Recommendations

In order to put in place an effective system for public awareness and participation, media must be empowered so that they can provide the needed support in informing and engaging the public. To do so, a media strategy needs to be developed to provide a framework for preparation of the necessary tools for media empowerment. In addition, the SCBD's awareness materials are also very useful and must be tapped into to further promote the Protocol.

Conclusion

In the context of a developing country, such as Liberia, the concept of biosafety is less understood than in other countries and hence presents serious challenges to effectively communicate it to the general public. This problem could be addressed by the development of awareness materials that provide basic understanding on the subject matter. The media is a critical mass communication channel and therefore must be engaged, and their capacity must be built, to meaningfully contribute to effective public awareness and participation on biosafety issues. Above all, the sustainability of national awareness initiatives is seriously undermined by the lack of funds, especially in least developed countries.

Challenges facing media in reporting on biosafety issues:

Leadership's experience



by Chinyere Amalu ● Ms. Chinyere Amalu is a journalist at the *Leadership* newspaper. She can be contacted at: amaluyere@gmail.com.

Biotecnology is a field of applied biology that involves the use of living organisms and bioprocesses in engineering, technology, medicine, agriculture, education and other fields that require bio-products to manufacture products intended to improve the quality of human life. Biotechnology draws on the pure biological sciences and, in many instances, it is also dependent on knowledge and methods not related to biology.¹ Conversely, modern biological sciences, including concepts such as molecular ecology, are intimately entwined and dependent on the methods developed through biotechnology and what is commonly thought of as the life sciences industry.

The application of modern biotechnology is more conspicuous in the agricultural and medical field because of positive effects of its application in improving agricultural products and in carrying out DNA tests in humans. Biotechnology has proved to be one of the tools that could shape the economy in the near future, especially in the agricultural field. Many countries have signed the Cartagena Protocol on Biosafety. However, many schools of thoughts and human rights activists had argued that GM food have health implications, even though there is no evidence to prove this claim.

Media coverage of biosafety issues

For modern technology to be beneficial, especially in rural areas where farming dominates other sources of livelihood, and where much importance is attached to traditional way of farming, the media has a major role to play in sensitizing, educating and informing the public on the importance of biotechnology in our daily lives. Being a complex issue, the public should be well informed on the application and implication of biotechnology and its safety. Unfortunately, African journalists do not have accurate information in reporting on biotechnology-related issues. It is only when the media has the relevant information that it can properly educate the public. In Nigeria, for example, most journalists that report on science issues have little or no knowledge on issues related to biotechnology/biosafety. When they do report on these issues, they lack relevant facts. Not only in Nigeria but in Africa in general, the applications, benefits and implications of biotechnology are under reported due to inadequate information.

¹ A few of the biological sciences are genetics, microbiology, animal cell culture, molecular biology, biochemistry, embryology and cell biology. A few of the knowledge and methods not related to biology are chemical engineering, bioprocess engineering, information technology and bio-robotics.

In Nigeria, and in most African countries, science and technology issues are generally under reported and seen as an abstract and too technical for an ordinary person to understand. Being a new concept in science reporting, journalists do not put much interest in understanding the basic terms in reporting biotechnology. One reasons being that information on this issue is not readily available for media or is difficult to access. For instance, there is only one agency in Nigeria, the National Biotechnology Development Agency (NABDA), that handles modern biotechnology and its safety in the country. Only this agency makes information available with local content. However, this information provides little or no impact on informing the public on biotechnology and its safety. The NABDA has a monthly forum, the Open Forum on Biotechnology, which holds interactive sessions between stakeholders in the agricultural sector and the agency. However, the expected impact is not felt, thus making the whole concept of biotechnology and its safety a difficult issue.

Although the National Assembly has passed a biosafety bill, it has yet to become law. The bill still needs to be approved by Nigerian President Goodluck Jonathan. In this regard, the issue of modern biotechnology is gradually gaining ground and people are beginning to understand the concept, especially the federal government of Nigeria. According to the Director General of the NABDA, Bamidele Solomon, "Biotechnology has remained the major tool to solve food security both in Nigeria and Africa in general, but media need to do more in their reportage". But how can the media do this alone, without the political will of the government and in the absence of vital information.

Dissemination of biosafety issues

As mentioned earlier, the media finds it difficult to collect information on biosafety issues, despite consistent efforts to find information. The information is simply not available. In addition, there are no institutions to provide information. In Nigeria, forexample, there are no non-governmental organizations (NGOs), backing the NABDA in promoting awareness on biosafety issues. Some media outlets are raising awareness, but not enough media are, because of the constraints they face. Other institutions, such as universities, that should be providing information on this issue, have little or no knowledge of the matter. Emmanuel Ochi of News Agency of Nigeria said: "There is a report I am writing on and I have made



⋮ It is only when the media has the relevant information
 ⋮ that it can properly educate the public

all effort to have an interview with the Director-General of NABDA, but he is not always on sit and no NGO to talk to. So I think I should concentrate on other issues". Emmanuel is not alone on this; about 50% of African journalists are facing the same problem. Also, news editors frequently push stories on biosafety aside because if the reporter cannot authoritatively write on the issue, or even defend an article on it during an editorial meeting, the news editor can render little or no support, and thus results in the story not being included in the national newspapers. .

Developing engaging articles on biosafety

Developing an article on biosafety is very simple, if the resources are there as biosafety cuts across other aspects of life. Aside from improving agricultural products, even though in Africa the agricultural sector is the only sector where the potential and benefit of biotechnology applications are explored, it impacts health because it involves DNA tests. Environmental issues are an interesting area where biotechnology and its safety play major roles. In this regard, engaging articles can emanate from these stories. For instance, is bioremediation and biodegradation an application of

biotechnology in the cleaning of a contaminated environment? Biotechnology is being used to engineer and adapt organisms, especially microorganisms, in an effort to find sustainable ways to clean up contaminated environments. The elimination of a wide range of pollutants and wastes from the environment is an absolute requirement to promote a sustainable development of our society with low environmental impact. Highlighting this in an article can make a great impact on people in the Niger Delta of Nigeria, where the lands have been contaminated due to oil spillage.

However, for biosafety issues to be globally reported, journalists must be constantly empowered through training and re-training to build their capacity. Non-governmental organizations should also be included. The training should be established by government and facilitated by institutions which are experts in the field. This is the only way the media can effectively sensitize, inform and educate the public on biotechnology and biosafety issues.

Promoting biosafety awareness through online networks:

SciDev.Net's experience



by Luisa Massarani ● Ms. Luisa Massarani is a Coordinator of Latin America and the Caribbean at the Science and Development Network (*SciDev.Net*) (www.scidev.net). She can be contacted at: luisa.massarani@scidev.net.

The Science and Development Network (*SciDev.Net*) publishes articles on GM crops and handles the complexity of the policies that influence the amount of GM used in the developing world. *SciDev.Net*, a not-for-profit organisation, is dedicated to providing reliable and authoritative information about science and technology for the developing world. The website provides policymakers, researchers, media and civil society information (in English, Spanish, French and Chinese) and a platform to explore how science and technology can reduce poverty, improve health and raise standards of living around the world.¹

GM crops are among the topics continuously published on the website.² A central aspect for *SciDev.Net* is to present different points of views on the issue and from different stakeholders. These include views from journalists, scientists with different backgrounds and policy makers.

The most challenging aspect in writing stories on GM crops is to find reliable information, as the debate is polarized. Some people “favor” growing GM crops, others are against it. In response to such a challenge, a strategy was established at *SciDev.Net*. The strategy relies on papers submitted to a peer-review process which, although not infallible, is part of the scientific process. Furthermore, in the news story, *SciDev.Net* includes a comment by an independent expert. This assists the readers to determine the importance and, if any, the limitations of the study.

● The most challenging aspect in writing stories on GM crops is to find reliable information, as the debate is polarized

For example, María Elena Hurtado in her article discussed a paper published by Mexican scientists in the journal the *Molecular Ecology* on GM cotton genes found in wild populations for the first time. The discovery makes it the third plant species — after Brassica and bentgrass — in which transgenes have been discovered in the wild.³ Besides reporting on the data, she interviewed an independent researcher who explained the meaning of the results. In addition, in a paper published by the *Science*, scientists in China called for more thorough risk assessments for GM crops after they discovered a surge in pests in a region planted with Bt cotton. The information was taken from a 15-year study based on surveys from a region in northern China where 10 million small-scale farmers grew nearly three million hectares of Bt cotton, and 26 million hectares of other crops. It revealed widespread infestation with the mirid bug (Heteroptera Miridae), which was destroying fruits, vegetables, cotton and cereal crops. According to them, the rise of the pest correlated directly with the planting of Bt cotton.⁴

Dealing with uncertainty and risk is another important challenge in communicating GM crops. The people “in favor” of GM crops tend to minimize the argument of a possibility of uncertainty and risks; people “against” GM crops tend to amplify them. Communicating uncertainty and risks requires showing scientific data and discussing such data. In this context, an independent researcher also assists readers to contextualize the uncertainty which may be understated by the specific agendas of those actively seeking to mobilize the media.

Decisions taken by governments and the public sector are often reported by media. These can specifically be on decisions or might emerge over the longer term from a trajectory embarked upon well before the story was published. For ³ “GM cotton genes found in wild species”, María Elena Hurtado, *SciDev.Net*, 13 October 2011, www.scidev.net/en/agriculture-and-environment/gm-crops/news/gm-cotton-genes-found-in-wild-species-1.html.
⁴ Bt cotton linked with surge in crop pest, Xie Lai, 14 May 2010, www.scidev.net/en/news/bt-cotton-linked-with-surge-in-crop-pest.html.

¹ The website is available at: www.scidev.net.
² The articles on GM crops published by *SciDev.Net* are available at: www.scidev.net/en/agriculture-and-environment/gm-crops/.

example, *SciDev.Net* published an article when the Kenyan government made a controversial move to allow the import of GM maize from South Africa. The article highlighted information on the government's argument that it was crucial to import GM maize to fight hunger and starvation, which was on the increase due to drought, even though GM crops were legally not to be grown in the country.⁵ The GM maize could only be imported under certain conditions. These include: maize not being used as seeds; the products clearly being labeled and a certification on the products by the National Biosafety Authority.

This story illustrates the continuities and contextual nuances which shape policy decisions. The stories often require journalists and readers to know more about the decision-making process and the organisations involved in the process which can be difficult. It reflects the second major challenge in writing stories on GM crops. Very often, these stories have a reference to a series of decisions taken in the last decade. A full chronology is difficult in a 400 word article. However, online publishing makes it possible to include links to previous stories and historical documentation. For example, in 2011 a decision was taken in Peru to set up a 10-year moratorium during the mandate of President Ollanta Humala. Commercially grown GM crops is forbidden and research has to take place in a controlled environment.⁶ The decision superceded the previous decision by a decree that allowed the development of GM crops in Peru. Apart from these discussions, further studies are needed that provide an understanding of the impact of such crops, particularly with regard to biodiversity and existing related policies and legislation. The debate on the moratorium started during the mandate of the previous President, Alan García, who, with his ministers, said that the moratorium would jeopardise research.⁷

Another *SciDev.Net* tactic is to ensure a quality of media coverage on GM crops by investing in technical and contextual knowledge of specific writers. Brazil, one of the world's leading producers of GM crops and the place of very intense controversies, is indeed a very interesting example. Since 1998, the country has attempted to produce GM crops on a commercial scale. However, until 2003, the country has prohibited growing and selling GM crops. In February, when the controversies were especially significant, it was found that a major proportion of Brazilian soy crops were transgenic due to illegal planting in Rio Grande do Sul, a Southern state in Brazil.



MARINA ZLOCHIN LEADERSHIP AND COMMUNICATION / PHOTODISC / ISTOCKPHOTO/THINKSTOCK

On the other hand, in December 2002, a survey conducted by the Brazilian Institute of Public and Statistical Opinion (IBOPE) showed that 70 % of Brazilians would prefer to consume GM-free products.⁸ This led to a complex process, which included designing a new biosafety legislation, and dozens of stories on an evolving debate. Nearly all of these stories were written by the *SciDev.Net*'s regional editor for Latin America, who is based in Rio.⁹ The complexity of the debate was even greater, when the permission for research on embryonic stem cells was included in the same legislation.¹⁰

Writing articles on GM crops, based on different countries similarities but, often with specificities which lead to significant differences, can be a challenging task for journalists and the readers of their articles. In particular as the dynamics of discussions and interests are not always visible. On the other hand, *SciDev.Net* recognizes that this is an opportunity to show that science journalism is much more than covering the wonderful science aspect. It is about linking science, society and decision-making. It is about providing the public with reliable tools to understand the issue.¹¹

5 Drought persuades Kenya to import GM maize, Peter Kahare, 10 August 2011, www.scidev.net/en/agriculture-and-environment/gm-crops/news/drought-persuades-kenya-to-import-gm-maize.html.

6 Perú: diez años de moratoria a transgénicos (Peru: 10 year moratorium on GM crops), Zoraida Portillo, 10 November 2011, www.scidev.net/en/agriculture-and-environment/gm-crops/news/peru-10-year-moratorium-on-gm-crops.html.

7 Peru wavers on ten-year halt to GM imports, Zoraida Portillo, 13 July 2011, www.scidev.net/en/agriculture-and-environment/gm-crops/news/peru-wavers-on-ten-year-halt-to-gm-imports.html.

8 The survey (Pesquisa de Opinião Pública sobre Transgênicos - Survey on Public Opinion on Transgenics) is available at www.idec.org.br/files/pesquisa_transgenicos.pdf.

9 For further information, please view the article "Brazil says 'yes' to GM crops and stem cell research" by Luisa Massarani, 7 March 2005, www.scidev.net/en/news/brazil-says-yes-to-gm-crops-and-stem-cell-research.html; Aprobación de maíz transgénico genera crisis en Brasil, Luisa Massarani, 20 August 2007, www.scidev.net/es/news/aprobacion-de-maz-transgenico-genera-crisis-en-br.html; Fallo a favor de audiencia pública por maíz transgénico, Luisa Massarani, 20 diciembre 2006, www.scidev.net/es/news/fallo-a-favor-de-audiencia-pblica-por-maz-transg.html; Brazil's quandary on bioethics, David Dickson and Luisa Massarani, 8 March 2004, www.scidev.net/en/editorials/brazil-s-quandary-on-bioethics.html.

10 Brazil says yes to stem cell research — again, Luisa Massarani, 30 May 2008, <http://m.scidev.net/en/news/brazil-says-yes-to-stem-cell-research-again.html>.

11 For more information on GM crops, the *SciDev.Net* has recommended the Global Status of Commercialized Biotech/GM Crops (2011) by Clive James available at www.isaaa.org/resources/publications/briefs/43/executive-summary/pdf/Brief%2043%20-%20Executive%20Summary%20-%20English.pdf.

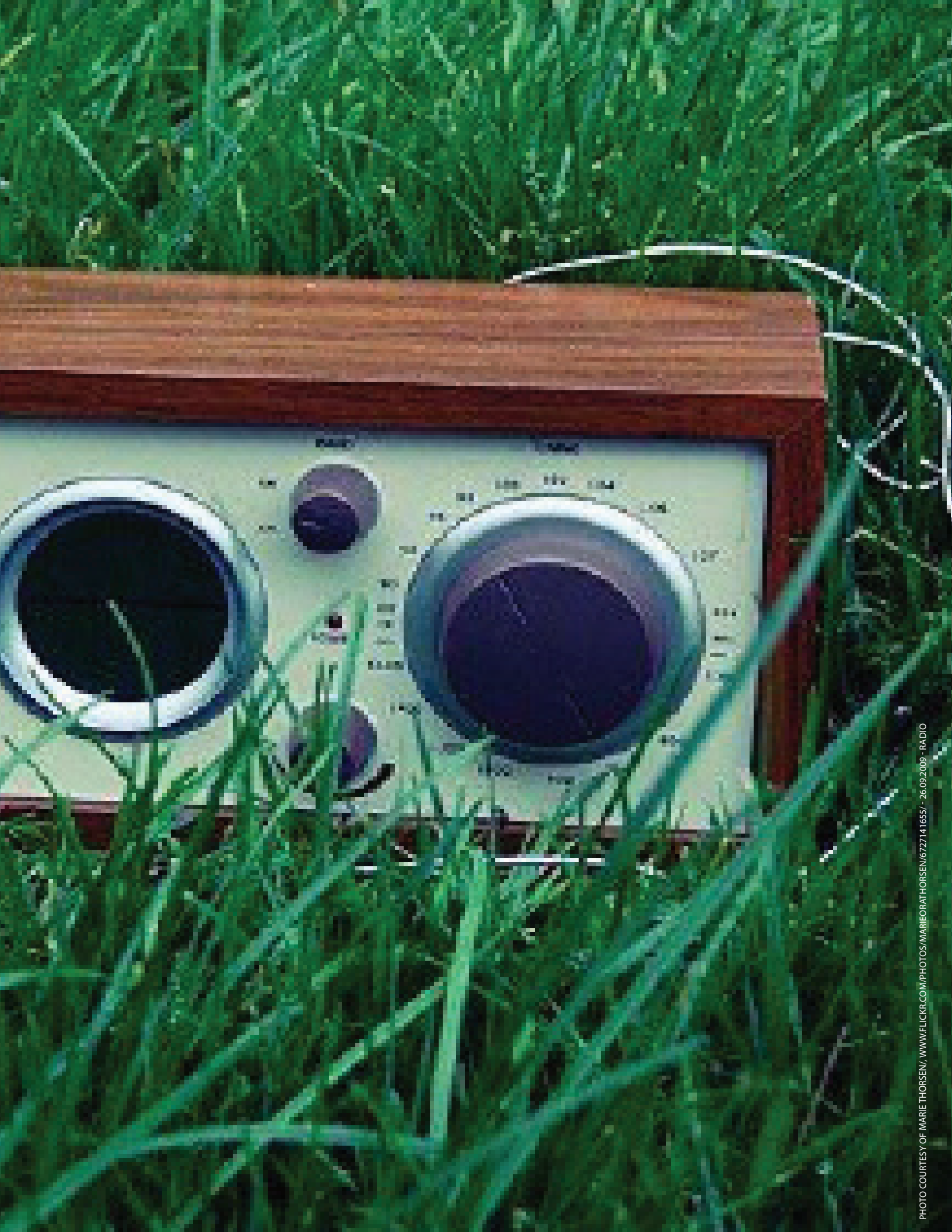
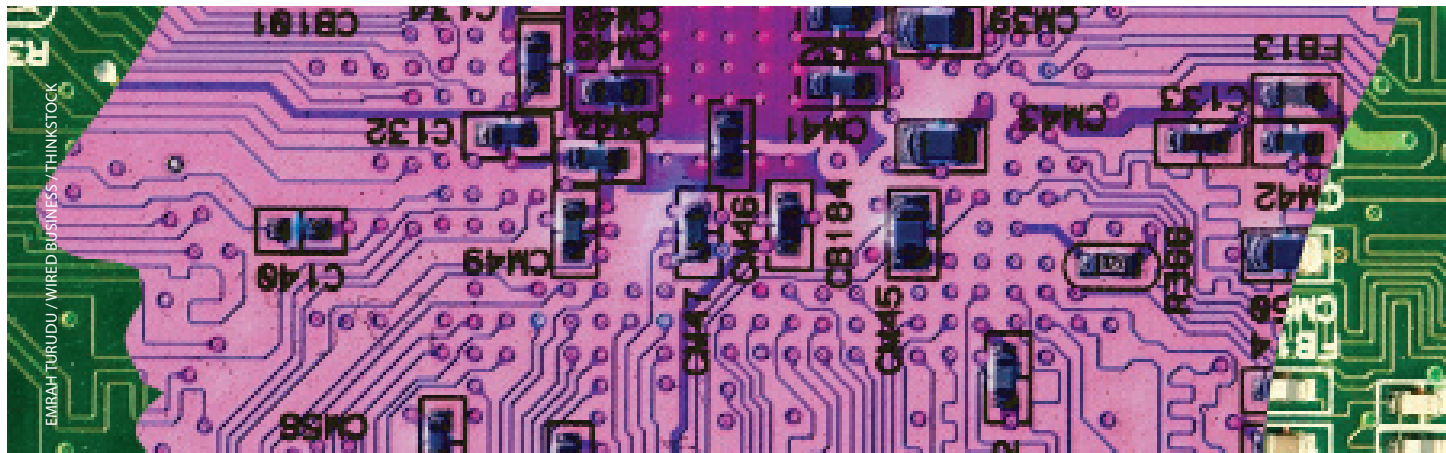


PHOTO COURTESY OF MARIE THORSEN, WWW.LICKR.COM/PHOTOS/MARIEORATHORSEN/6727141655/- 26.09.2009 - RADIO

Useful information

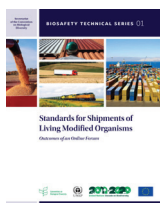


New publications and information



Year in Review (Biosafety part on page 51)

The booklet is available at: <http://www.cbd.int/doc/reports/cbd-report-2011-en.pdf>



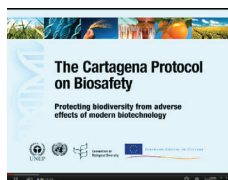
First, second and third issue of the Biosafety Technical Series (BTS):

The technical series are available at: http://bch.cbd.int/protocol/cpb_technicalseries.shtml



Fact sheet on the Cartagena Protocol on Biosafety translated in Spanish, French, Russian.

http://bch.cbd.int/protocol/cpb_factsheets.shtml



Video on the Cartagena Protocol on Biosafety translated in Arabic, Spanish, French and Russian.

http://bch.cbd.int/protocol/cpb_media_video1.shtml



In memory of Ms. Marie Aminata Khan, the former SCBD Gender Focal Point and Information Officer, who organized a successful Journalist Dialogue/Workshop on 11 November 2009, Montreal, Canada with a component on the Cartagena Protocol on Biosafety, we encourage Parties to consider gender and biosafety.

Please review more information at: <http://www.cbd.int/gender/documents/>



COP-MOP 6 Website

<http://bch.cbd.int/mop6/>

Media page: <http://bch.cbd.int/mop6/media/>



Second National Report

<http://bch.cbd.int/database/reports/>



Launch of an Online Forum on Public Awareness:

http://bch.cbd.int/onlineconferences/portal_art23/pa_main.shtml



Biosafety Awareness Survey

http://bch.cbd.int/onlineconferences/portal_art23/pa_survey.shtml



Biosafety Media Network

http://bch.cbd.int/onlineconferences/portal_art23/media_network.shtml



Useful links for media

-Media and Outreach: http://bch.cbd.int/protocol/cpb_media.shtml
 -News Headlines: <http://www.cbd.int/information/news.shtml>
 -Interview requests: media@cbd.int
 -Press releases: http://bch.cbd.int/protocol/cpb_statements.shtml
 -Flickr: <http://www.flickr.com/photos/mop6/>

Cartagena Protocol on Biosafety on Facebook

<http://www.facebook.com/UN.Biosafety>



Recent and upcoming biosafety events

RECENT KEY MEETINGS AND EVENT

Biosafety Clearing-House

In collaboration with the UNEP-GEF Project for Continued Enhancement of Capacity-Building for Effective Participation in the Biosafety Clearing-House, the Secretariat contributed to the organization and servicing of the following capacity-building workshops: Asia-Pacific and CEE Regional Training Workshop for Biosafety Clearing House National Focal Points (BCH-NFP), 24-28 October 2011, Daejeon, Republic of Korea; Africa Regional Training Workshop for Biosafety Clearing House National Focal Points (BCHNFP), 14-18 November 2011, Tunis, Tunisia.

In addition, in collaboration with UNEP-GEF project, a capacity-building workshop was held in Panama City, Panama, 5 - 9 September 2011 and the seventh meeting of the Informal Advisory Committee of the Biosafety Clearing-House, 28 - 30 March 2012, in Montreal, Canada.

Public Awareness and Participation

The Secretariat held an exhibition on 29 May 2012 at McGill University, in collaboration with the Redpath Museum, highlighting the UN Decade on Biodiversity. The event, which was attended by more than 2900 visitors, contributed to raising awareness on the Protocol as one of the tools in promoting the conservation and sustainable use of biodiversity.

The Secretariat also launched a Portal and an Online Forum on Public Awareness, Education and Participation Concerning the Safe Transfer, Handling and Use of LMOs, including two discussion groups on public access to biosafety information. The two discussion groups had a total of 98 participants. A total of 155 messages were posted: 56 from Discussion Group 1 and 99 from Discussion Group 2.

Risk assessment and Risk Management

The Secretariat organized three training courses on Risk Assessment of Living Modified Organisms - Belize City, Belize from 26 to 30 September 2011, Havana, Cuba from 7 to 11 November 2011 and the "Anglophone Africa from 12 to 16 December 2011 in Accra, Ghana .

The third round of Regional Real-time Online Conferences on Risk Assessment and Risk Management of Living Modified Organisms, comprising four regional conferences for Africa, Asia and the Pacific, Latin America and the Caribbean (GRULAC), and Western Europe and Others Group and Central and Eastern Europe (WEOG and CEE), was held in April 2012 through the Biosafety-Clearing House.

Furthermore, the fourth meeting of the AHTEG on Risk Assessment and Risk Management took place from 4 to 8 June 2012 in Montreal, Canada.

Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress

The Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety was opened for signature by Parties to the Cartagena Protocol on Biosafety on 7 March 2011 to 6 March 2012 at the United Nations Headquarters in New York. The opening for signature was attended by Advisor to Japan's Minister for Agriculture, Forests and Fisheries, the Executive Secretary of the CBD and the two Co-Chairs of the "Group of the Friends" which negotiated the text of the Supplementary Protocol. By the closing date, the Supplementary Protocol received 51 signatures. To date two countries have deposited their instrument of ratification of the Supplementary Protocol. The Supplementary Protocol will enter into force on the 90th day after the date of deposit of the 40th instrument of ratification, acceptance, approval or accession.

LEFT: The new Executive Secretary of the SCBD. RIGHT: Exhibition highlighting the UN Decade on Biodiversity, the Cartagena Protocol on Biosafety and the Green Wave, in conjunction with the International Day for Biodiversity at the Redpath Museum/McGill University.



During the reporting period, the Secretariat organized two more regional workshops on the Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety.

The Secretariat also organized four regional workshops on the Supplementary Protocol and an inter-regional workshop on capacity needs for the implementation of the Nagoya – Kuala Lumpur Supplementary Protocol on Liability and Redress.

Assessment and Review

The Ad Hoc Technical Expert Group (AHTEG) on the Second Assessment and Review of the Cartagena Protocol on Biosafety held its meeting in Vienna, Austria, 14 - 16 May 2012.

Socio-economic Consideration

The Secretariat organized a workshop on capacity-building for research and information exchange on socio-economic impacts of LMOs from 14 to 16 November 2011.

Capacity Building

The seventh Coordination Meeting for Governments and Organizations Implementing and/or Funding Biosafety Capacity-building Activities was held 4-6 April 2011 in Chisinau, Republic of Moldova.

The eighth meeting of the Liaison Group on Capacity-building for Biosafety was held 7-8 April 2011 in Chisinau, Republic of Moldova.

The Secretariat organized a Pacific sub-regional capacity-building workshop for the effective implementation of the Biosafety Protocol from 28 to 30 November in Nadi, Fiji.

Handling, Transport, Packaging and Identification

The Asian Sub-Regional Training of Trainers' Workshop on the Identification and Documentation of LMOs was organized in New Delhi, India from 21 to 25 November 2011.

Compliance Committee

The Compliance Committee held its ninth meeting in Montreal from 30 May to 1 June 2012.

For more information on the past biosafety events, please visit:

<http://bch.cbd.int/protocol/>

UPCOMING MEETINGS

28 September 2012 - 29 September 2012, Hyderabad, India:
Biosafety Clearing-House Training Workshop

29 September 2012 - 30 September 2012, Hyderabad, India:
Meeting of the COP-MOP Bureau

1 October 2012 - 5 October 2012, Hyderabad, India:
Sixth meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol on Biosafety

5 - 9 November 2012, Kampala, Uganda:
Africa Regional Capacity-building Workshop on Public Awareness, Education and Participation concerning the Safe Transfer, Handling and Use of Living Modified Organisms

LEFT: Ninth meeting of the Compliance Committee under the Cartagena Protocol on Biosafety. RIGHT: Seventh meeting of the Informal Advisory Committee of the Biosafety Clearing-House



COURTESY OF CBD



The Cartagena Protocol on Biosafety to the Convention on Biological Diversity is an international agreement which aims to ensure the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking into account risks to human health.

The Nagoya - Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety is an international treaty which aims to contribute to the conservation and sustainable use of biodiversity by providing international rules and procedures for liability and redress in the event of damage resulting from LMOs.